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PHYSICAL EDUCATION
ORIENTATION MANUAL

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Department of Physical Education
The Woman's College of the University of North Carolina
Greensboro, North Carolina

This material has been compiled for the convenient use of staff and students in freshmen sections this semester. It is to be regarded only as a first draft assembled for experimentation and evaluation. The committee hopes that staff and students who use this manual will make suggestions for its final revision.

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TABLE OF CONTENTS

	PAGE
INTRODUCTION.....	1
PHYSICAL EDUCATION AT THE WOMAN'S COLLEGE.....	3
<u>I</u> Aim and Objectives.....	4
The Degree Requirement	5
Semester Plan of Activities	5
The Orientation Program	5
The Individual and Modified Program.....	6
Elective Courses for A. B. Credit	6
Recreation Association	8
Department Regulations	9
MOTOR ABILITY TEST	11
UNIT I ORIENTATION	
A. What is Physical Education?	14
<u>B. A Brief Historical Survey</u>	20
C. The Program of Physical Education	32
D. Leisure	35
UNIT II HEALTH PRACTICES	46
UNIT III BODY MECHANICS	
A. Introduction	53
B. Interpretation of Posture Picture	59
C. Corrective Exercises for Common Faults	61
D. Dynamic Postures	63
UNIT IV RELAXATION	
A. Theory of Relaxation	68
B. Relaxation Techniques	89

INTRODUCTION

Education throughout the history of man has been influenced and shaped by the prevailing patterns of culture. Democracy as a pattern of living implies the concept of individual worth and simultaneously emphasizes the responsibilities and privileges of the individual in his society. It is the aim of education to so enrich the individual that he will experience a fullness of living and contribute effectively to the society in which he finds himself.

The various areas of education accept this as a common aim and make their contributions through various media and subject matter. Physical education is a phase of total education and as such aims toward the same goal -- that of orienting the individual in the process of meeting the persistent problems of living.

Ask yourself these questions. Do I know my limitations and, better still, my possibilities? Physically am I an asset or a liability to myself and my community? Have I developed a positive and constructive attitude toward health? Am I physically illiterate, or have I skills at my command, the ability to take care of myself in water or on the dance floor, and to enjoy an individual game played well? Have I ways of spending my leisure time wisely? How am I going to spend it after college opportunities are gone?

The welfare and adjustment of each student are sought through new values, interests, and appreciations. It is hoped that in discovering new interests and capacities she will find fun, skill in socially valuable forms of recreation, radiance in health and personality, and mastery of the technique of associations with others and with herself.

This orientation section is planned as part of the freshman course to give a background of understanding and an appreciation of the potential contributions of physical education to total individual development. The course consists of four units in the study of which teacher and student together will discuss certain aspects of the foundations and principles upon which physical education is based, the modern concept of physical education, leisure activities, posture and body mechanics, health practices, and relaxation.

The specific purposes of the course are:

1. To orient the student in the various areas of physical education and show their relationship to general education, health, use of leisure time, personality development, and vocational possibilities.
2. To provide the student with some means by which she can recognize her strengths and weaknesses in physical status and ability.
3. To make it possible for the student to develop a more intelligent approach to the modification of defects and to the establishment of better habits of using and developing the physical equipment with which she is endowed.
4. To develop student appreciation for and an understanding of the importance of a reasonable amount of strength, endurance, and ease of movement for efficient living.
5. To emphasize the importance of body control as it relates to relaxation, flexibility, and the use of the body in everyday living.
6. To stress health practices and their relationship to physical education activity.
7. To screen those students who need further work in body mechanics and relaxation.
8. To guide students in the selection of activities best suited to their individual needs.

Certain tests will be given early in the course to acquaint the student with her own physical potentialities and liabilities and to give her a basis upon which to select activities which will meet her individual needs. These will include a battery of tests

to measure motor ability, a posture examination, and an evaluation of the student's ability to relax.

DEPARTMENT OF PHYSICAL EDUCATION

The Department of Physical Education at the Woman's College offers a broad program designed to meet the needs of every college women. Through the required service program, each student is given opportunities to elect activities from a wide range of offerings. An orientation program in the freshman year assists the student in planning her individual program in physical education in terms of her needs, interests and competencies. This program serves also to develop understandings and appreciations of the nature of physical education as it contributes to the total education of the individual. Following the completion of the physical education requirement, a student may elect additional courses which carry academic credit toward the hour requirements for her college degree.

DEPARTMENTAL AIM AND OBJECTIVES

The aim and objectives of the Department of Physical Education do not differ greatly from those of every department of the College. The purpose common to all departments is the education of the college woman. In general, the aim of the department is to help each student to develop individually so that she will enrich her own experiences, adequately meet the demands of the society in which she lives and make abundant contributions to that society. The objectives are thought of in terms of physical, mental and emotional fitness, competencies in skills, habits, attitudes, appreciations, and knowledge.

Specifically, the Department of Physical Education attempts to contribute to the education of the college woman through the following objectives:

1. To offer a well-rounded program of activities for the development of organic efficiency.
2. To develop in each student specific neuromuscular skills which will contribute to recreation, relaxation, and safety.
3. To develop skill in and an understanding of efficient static and dynamic body control.
4. To acquaint the student with her own strengths and weaknesses in physical status and ability and to guide her in selecting activities which will meet her individual needs and give her satisfaction.
5. To emphasize the need for sound health practices -- sleep, exercise, proper food, rest and relaxation -- and to stress proper attitudes toward these important individual habits.
6. To provide opportunities for the development of emotional health, perseverance, courage, leadership, and loyalty, and other attributes of citizenship and character.
7. To provide opportunities for the development of constructive habits and attitudes toward play, health, recreation, relaxation, and human relationships.
8. To offer opportunities for the acquisition of certain appreciations in music, art, folk lore, literature, and dance which make for abundant living.
9. To develop creative ability.
10. To develop intellectual maturity by creating opportunities to face problems, to undertake their solution, and to evaluate the results.

The Degree Requirement

The College requires two semester hours (four semesters) of Physical Education for the Bachelor's degree.

In order to have a well balanced program, it is suggested that each student select her activities after careful study of the offerings of the Department of Physical Education. Each student should choose one semester from each of the following groups: (1) Team Sports: Speedball, hockey, basketball, softball, volleyball; (2) Individual Sports: Archery, badminton, bowling, golf, tennis, swimming, recreational sports; (3) Dance: Modern, tap, social, folk, square; (4) Elective: From any of the above groups or in individual Body Mechanics.

Semester Plan of Activities

The following activities may be elected by students who are not restricted for health reasons:

First Semester	Second Semester
Archery	American Country Dance
Badminton	Archery
Body Mechanics	Badminton
Bowling	Body Mechanics
Folk Dance	Bowling
Golf	Folk Dance
Hockey	Golf
Life Saving	Life Saving
Modern Dance	Modern Dance
Recreational Sports	Recreational Sports
Social Dance	Social Dance
Speedball	Softball
Square Dance	Swimming
Swimming	Tap Dance
Tap Dance	Tennis
Volleyball-Basketball	Volleyball
Tennis	

The outdoor season in the fall is followed by an orientation program for all Freshmen.

The Orientation Program

The election of an activity course by the student is determined by her interests and the results of her medical examination. The required freshman orientation program has been developed because the staff feels that there are certain basic fundamentals

which should be learned by every student. The course includes motor ability tests to be used in the guidance of the future election of activities and four units of study as follows:

1. Orientation dealing with information concerning physical education as a part of education, leisure activities, and a survey of the offerings of the department in terms of the individual needs of the student.
2. Posture examination, discussion and methods of correcting individual faults.
3. Health practices.
4. Relaxation.

The Individual and Modified Program

On the basis of the medical examination, the medical department makes a recommendation for activity suitable for each student, and the student must enroll for physical education within the classification of activities recommended by the college physician. Activity classes are offered ranging from the strenuous team sports, individual sports and dance for the unrestricted student to the modified activities and specialized work for the restricted student. The modified program meets the needs of the student who must adjust her activity because of some physical handicap, temporary or permanent health condition. The individual participates in this program under close supervision.

A posture examination is given to each student, posture needs are explained and exercises prescribed to enable her to work on her own problems. Students needing special attention in the correction of faulty body mechanics and posture are recommended for work in this area, and others who desire professional assistance in correcting posture faults may elect a course in individual physical education.

Elective Courses for A . B. Credit

Advanced work is offered for academic credit and is elective for Juniors and Seniors who have completed the requirement in physical education. Freshmen and Sophomores may be admitted to this advanced work by special permission but credit may not be substituted for the required freshman-sophomore courses. The elective courses offered by the department are:

241. Playground Organization and Management

The Theory of play, Techniques of teaching playground games, lead up games, and relays; the construction of equipment for school and community playgrounds. Three hours, both semesters. Credit, three semester hours. Miss Burdett.

334. Camp Leadership

Lectures, discussions, observations and required readings on camp programs, camp organizations and administration, and the place of camping in the educational program. One hour, second semester. Credit, one semester hour. Miss Leonard.

336. Advanced Modern Dance

Two hours, each semester. Credit, one semester hour. Miss Moomaw.

337. Life Saving and Waterfront Supervision

Designed for students interested in camp counseling and summer recreation programs. Two hours, both semesters. Credit, one semester hour. Miss Luttgens.

338. Sports Organization and Management

Tennis and Archery. Designed especially for recreation leaders, camp counselors, high school teachers and social workers. Fundamentals of coaching, standards of tournament play with emphasis on the value of health protection and ethics of sportsmanship. Two hours, second semester. Credit, one semester hour. Miss Davis.

339. Sports Organization and Management

Team Sports and Golf. Coaching and officiating of volleyball and basketball and the technique of golf. Two hours, first semester. Credit, two semester hours. Miss Greene.

340. Sports Organization and Management

Recreational sports, softball and bowling. Two hours, second semester, Credit, two semester hours. Miss Greene.

341. Principles and Procedures in Physical Education

Three hours, both semesters. Credit, three semester hours. Miss Burdett, Miss Leonard.

342. Social, Folk and Country Dance

A study of the national characteristics of music, costumes, dances, folk arts. Designed for the community worker, high school teacher or recreation leader. Two hours, both semesters. Credit, two semester hours. Miss Burdett.

343. Festivals for the School and Community

A study of traditional folk festivals and their adaptation to school and community use. Each student is required to write one festival based on the semester's study. One hour, second semester. Credit, one semester hour. Miss Burdett.

344. Community Recreation

A study of the philosophy of recreation, the organization and administration of community recreation, with observation and practice in group leadership in local community centers and playgrounds. Two lecture hours and three laboratory hours, both semesters. Credit, three semester hours. Miss Davis.

345. Elementary Dance Composition

The study of the rhythmic and musical basis of dance, the elements of an art and theatre in the structure of dances. Open to students who have completed Intermediate Modern Dance. One lecture hour, two one and one-half hour laboratories, first semester. Credit, two semester hours. Miss Moomaw.

346. Intermediate Dance Composition

Includes the study of the historical and anthropological bases of dance form from primitive through modern times. Open to students who have completed 345 or by special permission. One lecture hour and two one and one-half hour laboratories, second semester. Credit, two semester hours. Miss Moomaw.

354. History and Theory of Dance

The history and motivation of dance from primitive through present times. Study of theories of leading dancers. Two hours, second semester. Credit, two semester hours. Miss Moomaw.

355. Applied Dance

A coordinating course designed to increase skill in technique and the use of related art materials. One lecture hour, three hours laboratory, first semester. Credit, two semester hours. Miss Moomaw.

356. Applied Dance

A continuation of 355 in which more skill and maturity in the selection and use of materials is expected. One lecture hour, three laboratory hours, second semester. Credit, two semester hours. Miss Moomaw.

THE RECREATION ASSOCIATION

The Recreation Association is a student organization administered by elected student leaders. Members of the Physical Education staff act in an advisory capacity to the various clubs and activities. All students of the College are members of the Association and may become active members by participating in the program. There is intramural competition in all sports, and as an outgrowth of these residence hall tournaments, the Recreation Association sponsors some extramural games with neighboring colleges. "A sport for every girl and a girl in every sport," and "Play with the R. A. today and every day" have become slogans of the Association in the scheduling of daily activities for the participation of all students on the campus. Intramural tournaments are held in the following sports:

Hockey -- Speedball -- Basketball -- Golf
Archery -- Tennis -- Volleyball -- Bowling
Swimming -- Badminton -- Softball
Table Tennis -- Stunts and Apparatus

Interest clubs and special activities are also integral parts of the offerings of the Recreation Association. The following clubs are sponsored by the Association:

Dolphin and Seal -- Boot 'n Spur -- The Promenaders -- Co-off
Camp Counselors -- Archery -- Golf -- Tap Dance
Life Guard Corps

A completely equipped hobby shop is provided for the teaching of crafts as a recreational tool for interested students. The Recreation Association sponsors Monday Night Recreation Night with the opening and supervision of all facilities for swimming, bridge, dance, table tennis, pool, bowling, crafts and roller skating. At scheduled times during the week, the Association provides recreational opportunities in crafts, skating, swimming and bowling. On the weekend, co-recreational opportunities are open to students and their dates in the hobby shop, game room, swimming pool and bowling alley.

"Play with the R.A. Every Day"

Departmental Standards and Policies

The Department of Physical Education conducts its program under the guidance of carefully selected and experienced teachers, and in accordance with nationally accepted standards. Continuous efforts are made to effectuate these standards of modern physical education in the following ways:

1. By adhering strictly to health and medical standards in the guidance of the individual in suitable activities and in her participation in the sports and recreation programs.
2. By providing a directed instructional program in orientation, testing, discussion, and practice, through which the individual becomes familiar with her needs and interests and how best to satisfy them through physical activity.
3. By providing safe and ample opportunities for instruction in a variety of activities conducted in adequate and attractive facilities appropriate to the program.
4. By contributing to the general education of the college woman in terms of the development of certain competencies which will increase her effectiveness as a citizen in the society in which she lives.
5. By offering to all students opportunities to participate in intramural sports competition which emphasize fitness, skill competency, sportsmanship, and wholesome group relationships.
6. By conducting extramural activities as an outgrowth of the intramural program and in accordance with the standards set up by the National Section on Women's Athletics.
7. By providing competent and interested personnel for the conduct of the program.

8. By preparing teachers and leaders, on the undergraduate and graduate levels, with the knowledge, appreciations, and professional competencies which will insure good leadership in physical education, to the end that this phase of education will provide continuous experiences in democratic group processes.

9.. By offering assistance and guidance on the state and local levels through sports clinics, demonstrations, and programs of educational value.

10. By providing professional help to community service groups.

11. By the publication and distribution of materials which will foster an interest in and understanding of physical education and athletics for girls and women.

Regulations

The medical examination

Every student must have a medical examination by the college physician before participation in the physical education program. Classification for instruction is made on the basis of the medical reports of the student's physical status. The participation of a student in the sports or activity clubs sponsored by the department must be approved by the college physician.

Class Attendance

Regulations for class attendance and absence from classes are set up by the Student Government Association and follow the rules as outlined in the Handbook. In general, the regulations are the same as for any other class.

Costume

Each student is required to purchase an official costume from a local dealer after arrival at the College. The regulation outfit consists of two white suits, two pairs of socks, a white coat sweater, and tennis shoes. Clean, regulation tank suits are provided for students using the swimming pool. The suit fee is \$1.00 per year, per student. Each student must furnish her own bathing cap and shoes.

Locker and Dressing Facilities

Students must dress in the dressing facilities of the gymnasiums. A basket locker with a combination lock is provided for each student for storage of her gymnasium outfit. While attending class, students must protect their property by locking it in a locker available in the dressing room. It is urged that all gymnasium clothes be marked with the owner's name. A small fee is charged for rental of the combination lock.

Showers

All students are urged to take showers following an activity class. In scheduling physical education classes, every effort is made to leave a free period following the physical education hour to provide time for the shower which is considered essential to good personal hygiene.

Fees

In addition to the lock rental fee, and the swimming suit fee, small additional fees are charged in archery and golf for the replacement of arrows and golf balls.

Use of Equipment

Students must take responsibility for good care of all equipment used in class instruction and in the programs sponsored by the department and the Recreation Association. All equipment must be returned to the instructor at the end of the class period. With the permission of the supervisor of recreation or the instructor in charge, students may check out certain items of equipment for leisure use. This equipment must be returned to the department.

Use of Facilities

The facilities of the department may be used only at scheduled times and under the supervision of a staff member. Students are expected to assume responsibility for good care of the facilities of the department. This pertains to rest rooms, wash rooms, shower rooms and all other activity areas.

Safety

In the conduct of the program, every precaution is taken for the safety and protection of the individual. Students are required to practice sound safety procedures in class, in activity participation, and at all times when using the facilities of the department. Rules of safety are announced and posted and students must assume the responsibility of familiarizing themselves with these safety regulations. Specific regulations for the use of the pool, bowling alleys, tennis courts, game room, golf room and other activity spaces are posted in these unit areas.

MOTOR ABILITY TEST

General motor ability as defined by experts is general athletic ability, including aptitude and achievement, not a measurement of skill in any specific activity but general all-round ability. "It is the ability of the individual in the elements which underlie motor performance such as muscular strength, muscular power, muscular endurance, coordination, agility, balance, etc."¹ "An individual with a high score on such a test should perform well, or have capacity for good performance after a period of instruction, in a number of athletic events."²

The Scott Motor Ability Test consisting of an obstacle race, basketball throw for distance, and standing broad jump will be administered to all freshmen at the beginning of the first semester.

One of the objectives of physical education is to help the student develop sufficient skill in an activity so that she will enjoy it. The motor ability score is used to guide students in the election of activities in which they will have the best success, "...to determine the level of achievement expected in future work and the amount of individual help which will be needed to give satisfactory results."³ College women recognize their own abilities and are interested in an objective evaluation of their abilities. The evaluation if high will suggest the level of

¹ Leonard A. Larson and Rachael D. Yocom, Measurement and Evaluation in Physical, Health, and Recreation Education (St. Louis: The C. V. Mosby Company, 1951), p. 79.

² Harrison H. Clarke, The Application of Measurement to Health and Physical Education (New York: Prentice-Hall Inc., 1945), p. 223.

³ Gladys M. Scott, Evaluation in Physical Education (St. Louis: The C. V. Mosby Company, 1950), p. 211.

proficiency the student may anticipate in a variety of activities and should have a motivating influence. If the score is low, the student can elect work of a fundamental nature in an effort to develop basic skills or she can choose activities which can give her enjoyment and success. Knowledge of her score can in both cases help the student to plan a program that will be profitable to her.

Studies have been made regarding the relationship between motor ability scores and success in various sports. Data are not available concerning all physical education activities but Snell, as a result of a study made with college women at the University of Iowa, arrived at the following conclusions regarding archery, badminton, basketball, bowling, tennis and volleyball.

Of the six activities studied badminton, bowling and volleyball are the ones in which students with low motor ability have the best chance of success. Some of the reasons for the above statement may be as follows:

Achievement in bowling is entirely dependent upon one's own skill. This skill is repeated each time the individual bowls and the bowling distance remains constant.

Improvement in archery is slow even though the activity is an individual one and the shooting act is repeated. This may be due to the difficulty in adjusting the point of aim for the longer ranges and to the fact that errors in technique have greater effect on the flight of the arrow when shooting on the longer ranges.

The playing area in badminton is smaller than in tennis, therefore the individual has less distance to travel. The badminton racquet is lighter and can be more easily handled than a tennis racquet.

Volleyball does not require the player to move around the court to any great extent and the skills are less difficult and fewer in number than in the game of basketball.⁴

Salit drew the following conclusions regarding the development of fundamental sports skills in freshmen college women of low motor ability.

⁴ Catherine C. Snell, "A Study of Rates of Learning in Selected Sports as Related to General Motor Ability," (unpublished Doctor's dissertation, University of Iowa, 1948).

1. A sport skill program in which about half the time is devoted to the study of selected skills and the essential differences between good and bad performance, and the other half to the playing of such games as basketball, volleyball and aerial darts, is effective and practicable for college women of low motor ability.
2. Instruction and practice should be given in the fundamentals of running, jumping, throwing and striking. Special emphasis should be put on effort to develop physical capacity as well as skill.⁵

These suggestions may be of value to the instructor and student in planning the student's activity program.

In order that the student may interpret her score, T scales have been included. "T scales indicate the range of ability and performance to be expected from entering freshmen in college."⁶ You will notice that the T score range is from 85 to 13. At the University of Iowa where the Scott Motor Ability Test was constructed and is administered to all freshmen, a T score of 58 or above is considered high motor ability and a T score of 44 or below is considered low motor ability.⁷ This evaluation is the result of many years of study with numbers of college women students and is regarded as a reliable estimate.

⁵Elizabeth P. Salit, "Development of Fundamental Sport Skills in Freshmen College Women of Low Motor Ability," Research Quarterly, 15: December 1943.

⁶M. Gladys Scott, "Motor Ability Tests for College Women," Research Quarterly, 14: December 1943.

⁷Catherine Snell, op. cit. p. 9.

UNIT I - ORIENTATION

A. WHAT IS PHYSICAL EDUCATION?

Education through physical activity has gone on since the world began. Bear cubs grapple with each other in play; monkeys leap from tree to tree; the cave man developed his muscles to fight his enemies and get his food. And so down through the ages physical activity has been designed to meet the special needs of an individual, or a tribe, or a nation. Strength for war, leisure activities for the conquerors, agility for pleasure or profit, all have been at times part of what we now call physical education.

Physical
education
and
education

But what is physical education? Does physical education mean bulging muscles and profuse perspiration? Does it mean poise and agility, fun and good sportsmanship? Is it physical training, or physical culture, or "gym"? Physical education at one time or another in its long and varied history, has meant each of these.

The word "physical" is a restricting and limiting term and one often misinterpreted. We are interested not only in developing organic power and skills but through physical activity in developing the concomitant values: interest in wholesome leisure time pursuits, desirable standards of behavior, a sense of values, and the ability to make good judgments -- all of which contribute toward democratic citizenship. We accept the basic educational concept that man is a unity, an integration of mind, body, and soul. Physical education seeks to develop the individual physically, yes, but further, socially, intellectually, and morally through vigorous total body activity, toward social efficiency.

Physical
education
activities
as a
Laboratory
for
attitudes
and
appreciations

Of course the physical educator does not expect to arrive at this goal of social efficiency single-handed. He combines and integrates his efforts with those of the English teacher, the history teacher, the science and art and music teachers in striving to produce individuals more capable of effective living.

As the English teacher uses books; the science teacher, frogs and microscopes; the art teacher, paints, chalk and crayons; so the physical education teacher uses the body as a tool in striving toward education's ultimate goal. The frog and the microscope are used in the laboratory so that the student may actually see what is happening in the world of living things. Laboratory work is learning by doing and applying this learning to succeeding experiences.

Physical education is also a type of laboratory work, designed to cause the student to react to many and varied situations in the gymnasium, on the athletic field, and in the swimming pool in such ways as to produce desirable changes in his behavior and in attitudes and in conduct and in the acquisition of certain aspects of culture associated with the use of leisure time and with adequate physical expression; he is enabled to express himself decisively, to display initiative, physical courage and perseverance. He is encouraged to take part in physical activities in such a way as gradually to develop self-confidence, self-reliance, and a better morale. He is trained to be cool-headed and to control his temper, to cooperate with his fellow-students, and to be loyal to his team and his school; to be magnanimous, to respect the rules, to play fairly, to be thorough and dependable - to be, in other words, a good sportsman.

But physical education to be a worthy part of education must have a lasting effect on the individual. The greater emotional stability, the better habits and

¹ Charles H. McCloy, Philosophical Bases for Physical Education (New York: F. S. Crofts and Company, 1940), p. 56.

Physical
education
and the life
situation,
the individual
personality

and improved attitudes and appreciations, the more vital qualities of leadership, followership, and fellowship, the wider range of skill and abilities gained from the best in physical education should promote a modification of the individual in the basic elements of personality.

Physical education for the college student has a dual purpose. On the one hand, physical education must serve the girl now. It must seek to prepare her to live her life more freely and fully now; it must give her knowledge which will be useful to her now and it must give her skills which she can enjoy now and from which she can obtain satisfaction now, it must make its contributions to her physical, mental, and emotional health and to her physical, mental and emotional development while in college. On the other hand, physical education must look ahead. In the light of our present social and economic trends physical education should help the young woman to meet more easily and successfully her problems as an adult member of a community, her problem as a wife, or a mother, or as a business or professional woman. With experiences in a program of physical education planned to meet her needs, she should be a better adjusted, more wholesome woman.²

² Agnes R. Wayman, A Modern Philosophy of Physical Education (Philadelphia: W. B. Saunders Company, 1938), pp. 59-61.

QUESTIONS FOR DISCUSSION

1. According to your own definition of democracy, how can physical education educate for the democratic way of life?
2. From class discussion and reference material in the library find out some interesting facts about women in the field of physical education. Be sure to include Miss Mabel Lee and Miss Agnes Wayman.
3. What is your idea of an educated woman? When is she "physically educated"?
4. How can respect for the rules of the game, sportsmanship, team play, and loyalty learned in physical education carry over into the life situation? Can you name other habits and attitudes in physical education which would have such a carry-over?
5. What did you think of physical education in high school? Contrast your ideas then with your ideas on physical education as a college student.
6. Discuss, on the basis of your study of physical education in this unit, the significance of the following quotation:

Greeting his pupils, the master asked:

'What would you learn of me?'

And the reply came:

'How shall we care for our bodies?

How shall we rear our children?

How shall we work together?

How shall we live with our fellowmen?'

How shall we play?
 For what ends shall we live?
 And the teacher pondered these words, and sorrow was in his heart, for
 his own learning touched not these things.³

³Physical Education Syllabus. Woman's College of the University of North Carolina, Greensboro, N.C., 1945. p. 57.

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B. A BRIEF HISTORICAL SURVEY

Physical activity has always been an essential and vital part of man's life. In the earliest stages of man's development, his daily occupations requisite to the securing of food, self-preservation, and the propitiation of his gods gave a natural expression to his activity needs. An examination of modern primitive

Physical Education as old as the human race societies, as suggested by Rice,¹ shows that even today the mild labor, the search for food, the dancing, and the games make for superior bodies among uncivilized peoples.

Our present civilization obviously does not provide these natural means of physical development. Our democratic philosophy also suggests other beneficial outcomes of activity which include social and recreative values. It is essential, therefore, that unlike the preliterates we plan a program to meet the needs of our civilization and one which will satisfy these natural tendencies of man to engage in activities that will add to the fullness of life by giving satisfaction in skills, enjoyment of a sound body, and recreative pleasure. From the primitive to the modern man stretches a long fascinating panorama and it might be interesting for us to follow chronologically this historical development as it pertains to physical education.

In the history of man, certain ages and civilizations made outstanding contributions. We might attach to each of these certain guide words which characterize their influence on the development of physical education.

¹ Emmett A. Rice and John L. Hutchinson, A Brief History of Physical Education (New York: A. S. Barnes and Company, 1952), p. 3.

Primitive
physical
activities:
utilitarian

The first guide word might easily be utilitarian. Primitive men hunted and fished for food, fought or ran for their lives, danced to propitiate their gods, and engaged in simple games.

The people of early China, among the oldest of civilizations, because of the topography of their country which gave natural protection and their peaceful nature which did not foster aggression, had no urgency to develop strong bodies and engaged only in the mild labors required to sustain life in an agrarian culture. Their religious teaching comprised most of their education and its philosophy precluded the necessity for physical activity or the development of the individual. Their reverence for the past and ancestral worship created a static society. Certain medical exercises were prescribed as early as 2600 B. C. because diseases were thought to be the result of organic inactivity. A few other evidences of physical education activities appear later with the need for the development of the military and, according to the classics, among sons of the rich men who engaged in music, dancing, and archery.² The cultural pattern in India was similar with emphasis upon the spiritual and mystic. Some evidences of play, particularly among children, exist but adult physical education activities appeared rather late in their culture. "Yoga, an activity unique with Indians and involving exercises in posture and regulated breathing, was very popular."³

²Charles A. Bucher, Foundations of Physical Education (St. Louis: C. V. Mosby Company, 1952), p. 104.

³Ibid., p. 105.

Certain
ancient
civilizations:
militaristic

The ancient civilizations of Assyria, Egypt, and Persia emphasized activity in the education of their young men which would build strong bodies and train the youth in the use of military weapons.

Persia particularly was interested in military aggression and the development of a strong empire. Use of the bow and arrow, skilled horsemanship, wrestling, running, hurling the javelin, hunting, and marching, as well as training in traveling and living under privation and hardship, were part of the young man's education. There was, however, little thought for the intellectual development of the individual and consequently even the great conquests of the sixth century B. C. were short-lived. There was no ability to govern or hold conquered territory except through military subjugation which could not persist.

It was the Greeks who first held the concept of total mind-body development and it was this emphasis on the individual and his development to his fullest capacities, physically, mentally, and spiritually, that mark this first democratic civilization as one of the greatest of all time. Physical education received more emphasis during the

Greece:
Total mind-body
development

"golden age" of Athens than ever before or since in the history of man. Our modern democratic concepts of the worth of the individual and the need for the fullest development and the interdependence of mind, soul, and body agree with this early Greek thinking. Unfortunately in this earlier democracy, where slaves were important to the economy, opportunities were available to only a portion of the population which violates our modern concept of democracy.

The education of the Athenian boy consisted of "music" which also included literary and artistic studies and "gymnastics" which included all the physical

activities, equal time being devoted to these two phases of his education. The school of gymnastics was called the palestra. Here, running, wrestling, weight, discus and javelin throwing, jumping, and similar activities were engaged in, the aim being physical perfection. When he reached eighteen, the young man joined older boys and men in the gymnasia for activity and recreation and also received military training. It is interesting to note that the Athenian girl received no formal education but was taught domestic duties at home.

Interesting developments took place in others of the city-states of Greece but none of the programs produced the brilliance in art, literature, and philosophy that was achieved in Athens. The importance of the national events, of which the Olympics is the best known and was the most important, indicates the premium placed on physical skill. The greatest philosophers of the age, Socrates, Plato, and Aristotle, concurred in the belief that "a sound mind in a sound body" was paramount to fullest individual development. The modern world has a rich heritage in philosophy and ideals of education from the Greeks.

Rome:
spectatoritis

The Roman conquerors were a forceful, practical people who had no patience with theoretical Greek methods. Again physical education, reflecting Roman philosophy, became utilitarian and militaristic. From physical activity were derived the vigor, strength, and courage so vital to Roman dominance. Here was no thought of unity or harmony. Exercise was used in preparing soldiers for war. To characterize popular Roman athletic interest, we can use one word -- spectatoritis. Thousands of people crowded into tremendous stadia to watch professional athletes compete in chariot races and gladiatorial combat. Audiences thrilled to

accidents and death, and the more gory the combat the more appreciative they became. Does the picture of the Circus Maximus in Rome crammed with two hundred thousand cheering spectators thrilling to a daredevil chariot race remind you of anything today? What about auto races or a grueling wrestling match watched by two hundred thousand cheering Americans? That Rome's disintegration was influenced by her spectatoritis gives us something to think about.

Dark Ages: In darkness some seeds sprout best. Early Christianity emphasized the
some seeds doctrine of asceticism, the subjugation of the flesh with all its passions and worldly desires so that the soul might rise unhampered to great spiritual heights. The lamp of learning was kept burning in the monasteries and much of importance to civilization was preserved, but formal education among the people was neglected. Naturally physical education could not exist side by side with this degradation of the body and preparation for life after death rather than vital living in the present. So during the Dark Ages, the picture of physical education is depressingly blank. Nevertheless, in this darkness some seeds did sprout.

The barbaric invaders of Rome made an important contribution to later society even though they wrought horrible destruction. They were a strong, virile people accustomed to outdoor living and strenuous physical activity. They brought strong bodies and a love of activity which were important to the future development of the degenerate Roman people.

During the Middle Ages, feudal society again placed emphasis on physical and military education, intellectual education being reserved for the young men who elected to enter the monasteries. During his training for knighthood, from the age of

seven to twenty-one, the boy engaged in a variety of games beginning with marbles, seesaw, ball, and in a later period, tennis. With other pages he practiced swimming, jumping, running, fencing, boxing, and also climbing the walls of the castle. Eventually he became skilled in horsemanship and the use of weapons.⁴

The development of sports, particularly among the English people, was an important development which has strongly influenced our present program.

With the revival of learning which characterized the Renaissance of the fourteenth and fifteenth centuries came the real beginnings of modern philosophies and methods in education and physical education. Education, instead of preparation for life after death exclusively, aimed toward preparation for a more useful and happier life in this world. Physical education was given an increasingly important place in this new education, but it was considered to be useful only in developing the body. The concept of total body development, combining mental and physical benefits, had not been formulated.

Rousseau We might really call this era of real beginning and the succeeding
and
education years of growth an era of personalities in education and physical education. Jean Jaques Rousseau completely revolutionized educational thought with his "natural methods," stating that ". . . education should not aim to instruct, but simply to allow natural tendencies to work out their natural results."⁵ He also held the concept that the mind and body are an inseparable entity.

⁴ Rice and Hutchinson, op. cit., pp. 58-61.

⁵ Paul Monroe, A Brief Course in the History of Education (New York: The Macmillan Company, 1907), p. 282.

Germany
and Sweden:
personalities

Ling in Sweden and Jahn in Germany stand out as great promoters of physical activity and as such they influence physical education profoundly. They each formulated a system of gymnastic exercises as a step toward national unity and military strength. These systems were not based on studies of the nature of man or of his biologic and social needs and were not considered a part of the educational system. Their value to their originators and to their thousands of participants lay in their vitally patriotic appeal and their development of strong soldiers for the native land.

The early American colonists felt no need for an organized program of physical education. They were a pioneering and agrarian people who derived

American
colonists:
Puritanism
and the
three R's

activity from their daily occupations. Emphasis in education was on the three R's and their Puritan philosophy made them opposed to play and recreation even for children. So we see a partial return to the asceticism of an earlier period. In some sections, outside New England, certain sporting activities were engaged in such as hunting, fishing, skating, riding, bowling, and cockfighting.

During the nineteenth century, migrations brought many German and Swedish colonists to this country. Along with their native customs and costumes, they brought their gymnastic systems and during this period had a great influence on the introduction of physical education into the public school system. To them really goes the credit of first bringing physical education into the schools. Calisthenics and apparatus became an important part of the program. However, this formalized type of training with its military history was not well suited to the American way of life and except in a few

Importance of
the German and
Swedish systems
in America

instances or for remedial purposes, these systems have disappeared.

They did, however, play an important part in the early development of the program and remained in effect for some years.

The traditional British love of sports of the early colonists was eventually to be felt and to have its influence in shaping the American program. Toward the end

Sports in
the program

of the nineteenth century, tennis, football, and golf began to be popular and basketball, of American origin, appeared. A need was

felt for the establishment of playgrounds and many cities initiated them at this time.

Gymnastic and formal exercises had one last fling when during World War I everyone believed that formal gymnastics was the rock upon which health, strength and endurance for both civilian and soldier was based. Very soon though, the people of America came to see that here was not the answer to America's problem of preparedness or unity. Formality and command were not consistent with American thinking, while participation in a sports program was challenging and satisfying. Dance forms were emphasized and new theories of the value of play and controlled competition, group activity, and worthwhile recreation grew and gained in strength. Thus the War was actually a boon to physical education as it presented countless challenges for future planning and development.

World
War I :
Recreation

With the declaration of war by the United States, the recreation movement was stimulated and challenged as never before. At the request of the War Department, the Playground and Recreation Association organized the War Camp Community Service which functioned in those communities near which military camps were located. Wholesome and varied recreation for soldiers, sailors and civilians was sponsored and directed by the personnel of the War Camp Community Service. The recreational facilities of the entire country were mobilized for service during the war years. The Young Men's Christian Association and the Young Women's Christian Association working closely with

the War Camp Community Service made possible a gigantic recreational program. The conduct of this program was largely in the hands of a personnel trained in physical education.

Of utmost importance among the knowledges growing out of the confusion of the World War was that of the need of planned recreation. In 1918 the National Education Association included a worthy use of leisure time as one of its cardinal principles. The United States was committed not only to a consideration of the increase in leisure time but also to a constructive development of leisure.⁶

Prior to World War I, physical education was not a requirement in many of the schools. The results of the draft examinations, however, pointed up to the educators

Physical
Education:
importance
in the
curriculum

the need for an organized program of activity and shortly legislation

was passed in many states making physical education a requirement

in the curriculum. Studies of psychologists, physiologists, sociolo-

gists, etc., revealed the need for and value of play and recreation.

The depression of the thirties which created so much leisure and a lack of personal funds gave impetus not only to the development of the schools' programs but to the playground and adult recreation movements.

Continuance
of the
recreation
movement

In World War II, the importance of recreation for service men and civilians was recognized even more forcefully. The United Service

Organization is a proof of the significance of recreation in war

time, and the cooperative effort of all Service groups functioning together is an outstanding example of a democratic country at work.

⁶ Norma Schwendener, A History of Physical Education in the United States (New York: A. S. Barnes and Company, 1942), pp. 155-156.

The last
guide word:
democracy

The last of the guide words, that which characterizes the modern physical education program in the United States, is democracy.

The ultimate aim of education and physical education is to further individual development toward the enrichment of personal living and an abundant community life in a democratic society. It is hoped that physical education through its activities will make its contributions to the essential qualities of citizenship: cooperation, tolerance and understanding, individual initiative, loyalty, leadership and followership, resourcefulness, perseverance, and physical fitness.

QUESTIONS FOR DISCUSSION

1. From your study of this unit and from your knowledge of history discuss the statement that a nation's social and political philosophies are reflected in its programs of physical education.
2. How do the costumes for sports through history reflect the philosophy of physical activity of the period?
3. How can programs in sports and recreation be justified as to importance in time of war?
4. What effect does public opinion have on the progress of physical education?
5. What are some of the factors which retarded the development of physical education throughout its history?

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C. THE PROGRAM OF PHYSICAL EDUCATION

A changing conception

The preceding sections make it apparent that the concept of physical education has been a changing thing: from the harmonious development of the Greeks, through the asceticism of the middle ages, the revival of learning and the importance of physical education, to the development of the various gymnastic systems and finally the democratic American concern for the individual and his total education.

In the United States the program of physical education, especially for young women, has changed so that you would not consider the activities of girls in the eighteenth century as physical education at all. At that time, running was considered most unladylike, although dancing, termed sinful by some, was advocated for exercise as well as for the development of social poise. Back boards, well strapped to the back, were sometimes used to train young ladies to hold themselves in good position

Health and "Physical Culture"

During the nineteenth century, great strides were made in the program for women. Many secondary schools for girls were founded, but fears were frequently expressed that higher education would undermine the health of women students. These objections were met with promises of health care and "physical culture." Dancing was introduced by Emma Willard, calisthenics were advocated by Catherine Beecher, and Mary Lyon, who opposed dancing, was interested in the performance of domestic duties. So the emphasis was on the correction of defects, body building, and physical fitness through formal gymnastics, done to command

with wands and Indian clubs. Modest young women performed in voluminous pleated serge bloomers, long black ribbed stockings, and neatly laced high white tennis shoes.

Modern
emphasis:
Total
Development

The modern program in physical education is designed to meet the needs and interests of every girl. It includes a wide selection of activities of various types, adapted to all levels of skill and all differences in taste. The emphasis today is on her total development: mental, physical, social, emotional. Physical education aims to further this development through wholesome, joyful, vigorous activity.

Choosing
your
activity
Intelligently

Since student interests and needs are the bases of program planning, you as students must choose your activities intelligently to derive the maximum value from your time spent in physical education. The

following questions might be used as criteria for choosing an activity:

1. Does the activity interest me, or does it promise a new interest?
2. Will I enjoy it or find an undiscovered pleasure?
3. Is it suited to my abilities?
4. Will participation in this activity aid in developing me along much-needed lines - physical, social, emotional?
5. Can I use it as a leisure-time skill in college, with friends?
6. Will it be of practical value in postcollege days?
7. Does it offer the opportunity I need to work with others - to cooperate, to share?
8. Will it contribute to my physical health -- help to build endurance, and vitality; counteract the effects of too much sedentary life here at college?
9. Will it be of value to me in correcting my poor posture -- improve my figure?
10. Will it aid in giving me better coordination, grace, and rhythm of movement?
11. Will it be relaxing -- fun?
12. Will it help me learn self-control and how to get along with people -- make me more social?

13. Will it give me an opportunity to test out further a vague vocational interest I have in this field?
14. Does it give me an opportunity to express myself creatively?
15. Will it add to my store of aesthetic appreciations?
16. Will it enrich my life?¹

(Refer to Part I for discussion of the program of the Woman's College Physical Education Department.)

¹Helen A. Pendergast, An Appreciation of Physical Education (Baton Rouge, La.: Louisiana State University, 1940), p. 33.

D. LEISURE

What is
leisure
time?

Leisure time is thought of as that time remaining in a day after the completion of work responsibilities and the duties and obligations incident to work and living. It might be interesting to you as college students to analyze a normal day's or week's activity and discover your individual leisure time possibilities. There are many activities associated with living such as sleeping, eating, dressing and grooming, and associated with work such as getting to and from the job and preparation for the job, that are time-consuming necessities of life and things we have to do. These activities poorly planned cause many of us to be sure a twenty-four hour day is not long enough and that leisure time is a luxury a student cannot afford. A careful honest analysis of our time will undoubtedly reveal to us time utilized in doing what we want to do rather than what we have to do. This is your leisure potential.

Democracy
and
leisure

We have said previously that the education of an age is one of the evidences of the prevailing pattern of culture. This is also true of leisure time activities as illustrated very graphically in our entire history of western civilization.

The civilizations of the world have been made and unmade by the way in which people have used their free time. The direction of a civilization is conditioned by what people do when they work as well as by what they do when they do not work. People must work to make a living, and many advances have been made in science and technology as the outgrowth of labor. Necessity is the mother of many inventions and discoveries. While work is necessary for subsistence, and no country has ever been able to exist without it, the culture of a group is built up mainly during spare time. Thus, the direction of a civilization is shaped largely by the extent and uses of leisure, rather than by what people do when

they work. The tone of any society is conditioned by the quantity and quality of leisure, whether it be restricted to a few or indulged in by many. If people engage in creative and constructive activities during their leisure, civilization is advanced; if they indulge in useless and destructive activities, the social order deteriorates and progress is retarded.¹

Our pattern today is democratic, emphasizing the individual's worth and equality of opportunity. We have no "leisure class." As a result of our technologic advancement and social planning, leisure is the privilege of all men.

At the end of the eighteenth century, working hours were from "sun up to sun down." In 1835, began the ten-hour day, in 1842, the eight-hour day, and 1908 saw the beginning of the five-day week. In 1933, the range extended from thirty-five hours to forty eight hours per week, with forty hours most common. Today the the great mass of people start to work later in life and if granted a normal life span, retire before death takes them off. The years of labor for the average individual thus have been greatly reduced. Other contributions to an increased leisure time are longer recreation periods, holidays, and the decrease in the amount of home labor. This increase of leisure time has been very apparent in the past twenty years and community efforts to provide wholesome activities are constantly being made. A realization of the importance of challenging opportunities in all phases of recreation became very apparent as a result of our experiences in World War II. Community planners are expanding local programs even to the inclusion of a twelve-month school year to make facilities available to adults and children, commercial organizations of all kinds are capitalizing on new interests in bowling, golf, oil painting, and

¹ Martin H. Neumeyer, and Esther S. Neumeyer, Leisure and Recreation (New York: A. S. Barnes and Company, 1949), p. 13.

activities too numerous to mention. The trend is wholesome and interesting.

It has been estimated by Lipovetz² that the availability of leisure time from pre-school days to old-age averaged over a lifetime shows that 1/4 of the life span is leisure time. Leisure is not to be thought of as idleness or mere cessation of work but as a complement for work. Individuals have a responsibility for planning constructive leisure that will give relaxation, recreation, personal development, and contributions to communal living.

Labor and
leisure

Living is concerned with things we have to do and things we want to do. Staley³ has further categorized these as labor and leisure activities. It is not the activity itself which places it in a certain classification but rather the individual's attitude toward the activity. What is work for one may be a satisfying avocation for another. It is hoped that many people enjoy their "work" even though there is a compulsion behind it; it is known that many people are employed in monotonous jobs and derive small satisfaction other than earning a living. In either case their choice of avocation should bring new interests and a real opportunity for personal satisfaction and happiness. The choice reveals the true nature of the individual and his capacity for living.

As we analyze activities that are generally thought of as being recreative, we find that they fall into three general classes.

1. Something sedentary, for example: reading, viewing television, playing bridge.

² Ferd John Lipovetz, Recreation (Minnesota: Burgess Publishing Co., 1950), p.2.

³ Seward C. Staley, Sports Education (New York: A. S. Barnes and Co., 1939), p. 73.

2. Something with your hands, for example: playing the piano, knitting, handicraft.

3. Something physically active, for example: swimming, golf, tennis, bowling, dancing.

For real enjoyment the individual should make a choice and reach a level of satisfaction in an activity in each of these classes.

College life abounds in opportunities for wise use of leisure activities and also presents many avenues for development of interests that will provide satisfying avocations in post-college life. Required as well as elective courses, intramural activities and college government and leadership activities are advantages open to the college woman. Art, literature, music, photography, sports are some of the more obvious possibilities.

The Physical Education Department makes a contribution to each of these activity groups through its instructional and Recreation Association programs. Obviously its main contribution is to the activity class, and it is hoped that all students will discover at least one physical activity that will become part of their living pattern and contribute to the fullness of life.

A study made by the National Recreation Association in 1934 of 5000 adults located in 29 cities, illustrates the very limited use made of physical education activities during leisure time. The following is a list of the ten activities in which these adults most often participated:

1. Reading newspapers
2. Listening to the radio
3. Reading books - fiction
4. Conversation

5. Reading books - nonfiction
6. Automobile riding
7. Visiting or entertaining
8. Attending movies
9. Swimming
10. Writing letters

There are several reasons for such limitations - lack of finances to do otherwise, lack of convenient facilities, a driving desire not yet developed, and lack of talent or ability.

It is interesting to note the list of the ten activities the same adults have the greatest desire to enjoy:

1. Tennis
2. Swimming
3. Boating
4. Golf
5. Camping
6. Flower gardening
7. Playing musical instruments
8. Automobile riding
9. Attending theaters
10. Ice skating⁴

This second listing indicates to us the desire for physical activity. A comparable 1952 survey would be interesting in view of the increased facilities which we know are available for golf, swimming, bowling, etc.

Activities offered here Here at Woman's College instruction in many sports is offered and a certain amount of skills training is required of all freshmen and sophomores. All that is needed is the desire by the students to learn and to improve their abilities. Have you provided yourself with ways of using your leisure time

N. R. A., The Leisure Hours of 5000 People (New York: National Recreation Association, 1934).

wisely? Some of the college opportunities especially adaptable to leisure time use are

- Archery
- Bowling
- Golf
- Recreational Sports (ping-pong, shuffleboard, darts, croquet, badminton, billiards, etc.)
- Swimming
- Tennis
- Volleyball
- Camping
- Roller Skating
- Square and Folk Dancing
- Social Dancing
- Tap Dancing.

The instructional offerings of the department and your Recreation Association which makes available a full intramural program in various sports activities, membership in activity clubs, participation in arts and crafts, and camping opportunities at Camp A-Hut-For-Fun are discussed in more detail in Part I under The Program.

Youth Hostels A leisure movement that is of interest to college students and young adults internationally is the Youth Hostel Movement. The Youth Hostel was introduced into the United States by Isabel and Monroe Smith who were guests at the International Conference of Youth Hostels in Europe in 1933 and were officially invited to bring the idea to this country.

Anyone who enjoys travel in the outdoors may obtain a Hostel pass from the headquarters in New York City, \$1 for those under twenty-one and \$2 for those over. This pass entitles the bearer to the use of trails established throughout the country and to sleeping and eating accommodations at a very nominal cost. Hostel loops have been set up in New England; southern New York, New Jersey, and

Pennsylvania; North Carolina and West Virginia; Missouri and Iowa; Michigan, Illinois, Indiana, Wisconsin; Colorado; California, Oregon and Washington.

Hostels are located about fifteen miles apart on these loops or networks for convenient overnight stops whether one is traveling by foot, canoe, bicycle, horseback, flatboat, snowshoes or skis. Traveling is not done by automobile, train, or bus except to the starting point of the hosteling adventure.

The hostels are for the most part transformed farms with friendly farmer folk acting as house parents and allowing their barns or house to be used by traveling youth. There are separate sleeping quarters for boys and girls and common cooking and recreation rooms. The "house parents" supply blankets, beds and cooking facilities. The hosteler brings his own sheets and a sleeping bag and eating utensils. Travel is possible on one dollar a day. Complete details concerning passes, loops and hostels can be obtained from the Youth Hostel Headquarters at 6 East 39th St., New York 16, N.Y.

Opportunities after college After college years are over, Y.W.C.A.'s and other organizations aid in providing facilities and instruction in various leisure time pursuits. The majority of large cities have a recreation commission, as does Greensboro, which is financed by the city, and which exists for the purpose of setting up a flexible, varied, and well-proportioned program to suit the needs of all age groups and provide the greatest good to the greatest number of persons. As far as budget, facilities, and leadership permit, no area of leisure time interest is neglected.

Churches are aiding greatly in providing worthy use of leisure time. Why does the church need to concern itself with recreation? Is it not trying to mix oil and

water when it undertakes to coach a baseball team and lead a prayer meeting? This was the opinion held by the majority of persons not many years ago, and the one which still prevails in some communities. There are at least two good reasons, however, why the church should and does concern itself with recreation. First, through supervised play activities there is created an atmosphere of friendliness in which the people who are nominal or prospective church members can more easily achieve real membership. Second, the amount of surplus time, wealth, and energy is rapidly increasing and needs to be conserved. Aimless or misguided recreation is morally hazardous.

It is because of the fact that leisure time activities can be used as a means to realize good fellowship among its members, that the church faces the moral responsibility of supervising its social and recreational as well as its religious life.

There are also innumerable wholesome opportunities of a commercial nature. Bowling alleys, swimming pools, public golf courses and tennis courts are available in many communities. Parks in the cities and natural outdoor spaces in suburban and rural areas invite hiking, bicycling, camping, etc. Ample opportunities are available to those who have a sincere desire to enjoy recreation in daily living.

QUESTIONS FOR DISCUSSION

1. What is leisure?
2. What is work?
3. Why is leisure a problem?
4. What factors have contributed to an increase in leisure time?
5. List three subjects in your high school curriculum which were primarily for use in leisure time.
6. List courses available here which are especially adaptable to leisure time use.
7. Discuss the recreation problem in your home town; what do young people do after work?

ANALYSIS OF YOUR OWN LEISURE

	Time	Possible Reevaluation of Time
Sleep		
Meals		
Dressing & Grooming		
Classes		
Study		
Going to & from classes & residence halls		
Meetings		
Self-help		
Other		
Leisure (List activities)		

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UNIT II - HEALTH PRACTICES

A. HEALTH PRACTICES

Our health habits are very important in determining whether or not we shall be able to maintain the inherent vigor and health of our bodies. What and how we eat, how much we exercise and sleep, our exposure to fresh air and sunlight, and our cleanliness are all practices which are important to our health.

1. Nutrition

Nutrition is the name given to complicated processes of maintaining organic balance. The body must have fuel and oxygen and it then produces heat and various waste products. Our foods give us the where-with-all to repair worn out tissues and to nourish new cells providing both energy and materials for growth of these cells. Substances are also found in food which are adapted to regulating various conditions and glands of the body. A person may undergo short periods of malnutrition, but proper nutrition must then be provided to offset the effects. As we have seen from pictures of victims of starvation in foreign countries, a long period of malnutrition brings very obvious and permanent damage. Therefore, adequate nutrition is the first prerequisite to vigorous health. To maintain well-being, we must make a wise choice of foods. Inability to throw off infection and over-fatigue may be due to certain deficiencies in our diet. The daily requirements for food are found under D Weight Control, 2. Food requirements.

2. Exercise

Use of the voluntary muscles of the body is the only way to develop the organic systems of the body. Through exercise the heart and other portions of the circulatory system may be strengthened. Improvement of circulation stimulates all the systems of the body including the ability to digest well and the assimilation of food for the use of the individual. All functions of the body may improve with exercise and as a result of improved muscle tone the body has a feeling of well-being.

"Exercise, however, may be a two-edged sword - it can be made to give wholly good results, but it can also do harm. There are certain conditions under which vigorous exercise can be made to give effects which are entirely favorable. These are:

- a. A thorough preliminary physical examination and discussion of the individual's history of previous illnesses. This should be done by a competent physician.
- b. Participation in only those types of exercise suited to the age, sex, build and condition of the individual.

6. Bathing

Frequency of bathing varies with the individual but many people bathe every day. The cleansing bath should be taken with warm water. One important purpose of the bath is to wash away the sweat, oil, and dust which have gathered upon the skin and it is therefore necessary to use plenty of soap. Exercise should be followed by a shower both for cleanliness and to prevent susceptibility to colds. A daily bath or shower is recommended.

B. CONSTIPATION

Constipation is a common source of complaint in colleges. It is usually caused by irregular habits of living, weak abdominal muscles, insufficient exercise, improper diet with a lack of roughage, insufficient intake of water, worry, nervous tension and irregularity of bathroom habits.

Suggested Treatment:

1. If severe- see College Physician
2. If slight, try normal laxatives such as fruit or lemon juice at bedtime.
Normalize living habits.
3. Refer to class discussions for exercises, analysis of popular advertising of laxatives, cathartics, etc.
4. To prevent, follow a normal, wholesome regime:
 - (a) Eat a normal, balanced diet. The bulk of roughage is provided by fruits and vegetables. Stewed fruits, particularly prunes, may well be used occasionally to obtain regularity of movement.
 - (b) Develop regular bathroom habits.
 - (c) Develop habit of relaxation.
 - (d) Drink a reasonable amount of water.
 - (e) Take some regular exercise.³
 - (f) Work to improve habitual posture.

Exercises

- (1) Abdominal Exercise - lie on back, arms out shoulder height. Keeping knee straight, raise right leg and foot and try to touch it to left hand, keeping rest of body on the floor. Repeat to opposite side.
- (2) "Knee-bending-in a lying position with the back on the floor, lift the knee up, clasp it with the hands and pull the knee to the chest, pressing the thigh against the abdomen.
- (3) Bicycling - from a lying position on the back, raise the legs and lower trunk upward until the body is supported on the upper back and head with the hands supporting the body at the hips. Move the legs in a circular manner as if riding a bicycle.

³Ibid., p. 157.

- (4) Knee circling-lying on the back, bring the knees up to the chest and make a large circle from right to left, rolling the hips from side to side."⁴

C. MENSTRUATION

Menstruation should be a process as "normal as digestion." If it is accompanied by a great deal of pain, the cause should be investigated.

Some common questions are:

1. "Shall I take a bath during my menstrual period?" Bathing is essential. Sponge baths, tub baths or showers are safe for the normal individual. Use comfortably warm water and avoid chilling.
2. "How about exercise?" Exercise is beneficial. It strengthens the abdominal muscles and improves posture. Over strenuous exercising such as basketball or horseback riding should be avoided at least early in the period or if the flow is profuse.
3. "What changes should I make in my daily routine?" Continue the usual daily routine, eat good food, drink plenty of water, take mild exercise, have regular elimination and avoid undue fatigue.
4. "What shall I do about cramps?" Dysmenorrhea is painful menstruation. Menstrual backache is sometimes the result of poor posture. Other slight discomforts may be headaches or slight pelvic pain.
 - (a) Check general physical condition - sufficient sleep, rest, regular habits of eating, regular elimination, etc.
 - (b) Check habitual posture - is the lower back hollow? - Is the abdomen flabby?
 - (c) Strengthen muscles in abdomen and lower back.
 - (d) "What about pills?" - Only by doctor's prescription.
 - (e) If there is severe pain, definite irregularity of frequency or duration of flow, or other unusual condition, a Physician should be consulted.

A trial of the following exercises for the relief of minor menstrual disturbances is suggested daily throughout the month:

1. "Stretch out flat on the floor on your back. Bend your knees, separate knees, keeping feet on the floor near buttocks. Lift lower end of spine off the floor. Dig your waist into the floor. Pull shoulders back on floor. Keep this position as long as you can comfortably hold it. Relax and begin again.
2. Lie on back, arms at sides, palms up. Draw both knees up over chest. Slowly straighten both legs up. Bend both knees and place feet on floor close to buttocks. Work up to twenty times daily.

⁴Ruth B. Glassow, Fundamentals in Physical Education (Philadelphia: Lea and Febiger, 1932), pp. 121-122.

3. Take knee-chest position by getting on floor with weight on knees and palms. Separate knees at least 10 inches. Bend elbows resting forehead on hands. Hump the lower back like a cat. Exhale completely - hold to count of 10. Relax. Do exercise at least 12 consecutive times.
4. Abdominal pumping- lying on back, take a deep breath and hold it. Contract the lower abdominal muscles firmly; then exhale slowly through the teeth and finally relax lower abdomen.
5. From hook-lying position bring the body to a sitting position by raising the upper trunk. Lower slowly.
6. 'Lying on the back with the knees raised to the chest, separate the knees and curl the head and hips toward each other by a strong contraction of the abdominal muscles.'⁵

D. WEIGHT CONTROL

1. What is normal weight?

It varies for the individual according to bony structure, muscular development, age, etc. Most of the weight charts are the average weight of many people of the same age, height, and sex. They do not take into account individual variations.

2. Food requirements:

Food intake required by the individual varies with the

- (a) Age
- (b) Size and shape of the body
- (c) Sex
- (d) Degree of activity
- (e) Temperature of the body and of the surrounding atmosphere
- (f) Glandular activity
- (g) Efficiency of the digestive and assimilative mechanisms

Each day's diet should contain the following items:

- "(a) Green and yellow vegetables - some raw, some cooked
- (b) Oranges, tomatoes, grapefruit or raw cabbage or salad greens
- (c) Potatoes and other vegetables or fruits
- (d) Milk and milk products
- (e) Meat, poultry, fish or eggs
- (f) Bread, flour, and cereals - natural whole grain or enriched
- (g) Butter or 'fortified' margarine.'"⁶

⁵Ibid., p. 117.

⁶Diehl, op. cit., p. 121.

- c. A suitable training period in which the severity of the exercise is slowly and progressively increased to the desired level.
- d. Proper care should be taken of current injuries and illnesses."¹

3. Sleep

During sleep body cells are being renewed and replaced. Fatigue products are removed, repairs are made to tissue cells and all vital activities are slowed down. For college age students, eight to nine hours of sleep per night will be sufficient to produce maximum efficiency. "Sleep is the nearest a person ever comes to absolute rest. It is the time when the body's supplies of vital energy are replenished. This rest from activity is essential to life. The longest that anyone has been known to live without sleep is not quite ten days. The general effects of loss of sleep are fatigue, poor general health, irritability, nervousness, inability to concentrate and a decrease in accuracy, memory and speed."²

4. Relaxation

The habit of relaxation is well worth cultivating in these days of tension and unrest. Many people do not realize all the benefits to be gained from frequent periods of relaxation. Lying down for a few minutes after lunch and relaxing without actually falling asleep lowers pulse-rate and blood pressure. This type of relaxation relieves the feeling of being pushed and rushed and gives the individual a renewal of energy. The habit of relaxing at intervals throughout the day is very helpful in avoiding fatigue. Specific work on techniques for relaxation will follow in a later lesson.

5. Fresh Air and Sunlight

We all know that fresh air is important to health. Activity performed out of doors in favorable weather conditions is of greater value than the same activity carried on indoors. Sunlight is important to health, and when sunbathing is done properly it can definitely be an aid to health. In clearing up certain skin diseases, such as acne, sunbathing can be particularly beneficial. It can cause serious illness as well as painful burns if over-done. If you have not been out in the sun, start with ten minutes on each side and day by day increase the time by ten minutes per side. Lotion of some sort (olive oil or prepared suntan oil) should be used to protect your skin.

¹Dean Smiley, and Adrian Gould, A College Textbook of Hygiene (New York: Macmillan Company, 1945), pp. 343 and 334.

²Harold S. Diehl, Textbook of Healthful Living (New York: McGraw-Hill Book Company, 1950), pp. 233-235.

3. Overweight

At present we are very much aware of a number of dieting fads. Girls have tried to lose weight without due consideration of how it was done or with what results. Today, we are stressing moderate living rather than extremes of diet or exercises. Energy requirements are usually expressed in units of heat called "calories." The energy values of various foods have been determined in terms of calories. The requirements of an individual vary with age, size, sex, activity, etc. The average college student taking light exercise and studying and eating an average mixed diet needs about 2400 calories daily to maintain growth, strength, and health.

Causes of overweight.

- (a) Over eating
- (b) Inactivity
- (c) Glandular disturbances - see a Physician

Treatment

- (a) Remove cause
- (b) Check diet for "extravagances." (Obtain help from College Physician)
- (c) Check exercise habits

4. Underweight

The college student who is underweight suffers in appearance, is subject to fatigue, has low resistance to disease, and loses her general sense of well-being.

Causes

- (a) Wrong type of activity
- (b) Insufficient food intake
- (c) Insufficient rest and sleep
- (d) Inability to relax
- (e) Irregular habits of living
- (f) Glandular

Treatment

- (a) Remove the cause
- (b) Check living habits - get more hours of sleep at night and rest periods after lunch and dinner
- (c) Check food intake - quantity and kind

E. EVALUATION OF HEALTH HABITS

How do you measure up in these? Underline and fill in the blanks; then consider your results. Are you satisfied?

1. My daily exercise is _____ minutes.

2. My daily rest period is _____ for _____ minutes.

3. My food consists of little or great variety eaten regularly, irregularly, or at mealtimes.
4. Elimination is or is not by laxatives.
5. Cleanliness consists of:
Baths daily, bi-weekly or weekly
Showers following physical activity regularly, irregularly, never.
6. Additional clothing is or is not worn after physical activity to prevent cooling off too quickly.
7. My sleep consists of _____ hours each night.
8. Colds cause me disability - never, seldom, often.
9. Dysmenorrhea causes me disability never, seldom often.
10. My environment is or is not conducive to healthful living.
11. My posture is good, fair, poor, when walking.
My posture is good, fair, poor, when standing.
My posture is good, fair, poor, when sitting.

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UNIT III - BODY MECHANICS

A. INTRODUCTION

The very word posture carries for many an unpleasant connotation somehow reminiscent of parental correction, teacher suggestion, and general adult nagging. However, most people will frankly admit that good body carriage is one of the most obvious assets of an attractive person. Powers' models, dramatic actresses, singers Values of good body mechanics and dancers, and others, who because of the nature of their work constantly appear before the public, spend many hours in specialized training in efficient body mechanics.

It is essential that a model have the "figure" to wear clothes, but it is equally important that she know how to stand and move to show expensive garments to best advantage. A singer must know how to stand to present an aria both to favorably impress the audience and to give her the proper breath control to deliver her selection. Dramatic actresses by their standing and moving postures, as well as the lines they read, create characters and personalities for the audience. The dancer, with her body the basic instrument of communication with her audience, by her postures projects ideas and emotions through skillful and well-disciplined movement. Notice carefully the "before and after" advertisements. There is almost always some noticeable reduction in weight but usually a comparable improvement in standing posture which helps to enhance the general appearance. There are surely obvious aesthetic and social values to good body position.

What are the implications of all this for the student? In a sense we all have a public and are daily making impressions of one sort or another. We are not all gifted with especially attractive features, but many women have created a real illusion of beauty through healthy vitality and good body carriage. How much better an evening dress looks if the shoulders and back are good; how much trimmer you feel in a good-looking suit when you know it hangs properly; how much more comfortable you feel in a bathing suit when you know the body lines are good.

Aesthetic and social values When you appear for a job interview, well-groomed and meticulously dressed, how much better your first impression if you enter the room and sit for the interview with poise and easy movement. On a special occasion of this type, or many others we could cite, there is a good psychological effect as well. You somehow feel more assurance and confidence in your ability to make a desirable impression.

When the body parts are properly aligned in relation to one another, it is reasonable to suppose that body organs are housed more efficiently and that body Physiological value systems are apt to function better. Certainly, strains and tensions will be reduced to a minimum and one should be able to resist normal fatigue longer. How often have you sat at your books, probably incorrectly, for a few hours to get up and put your hands up to feel the tightened musculature in the back of the neck and upper part of the shoulders?

We have been discussing without definition standing and moving postures and should perhaps clarify our terminology. In the first place, what does posture itself

Definition
of posture

mean? Webster says that body posture is the relative arrangement of the parts of the body; the position or bearing of the body as a whole, whether characteristic or assumed for a special purpose. There is a body **alignment** which is considered characteristic and most efficient for each of us dependent upon the type structure we have. Normally, people think of posture as good standing position, relatively inactive with only sufficient musculature exerting force to maintain the position. This is known in body mechanics as static posture. Webster includes in his definition "a position . . . assumed for a special purpose." This we call a dynamic position or dynamic posture. There is a most efficient way to perform everyday activities so that a minimum of effort and energy expenditure will deliver the power we desire with maximum results.

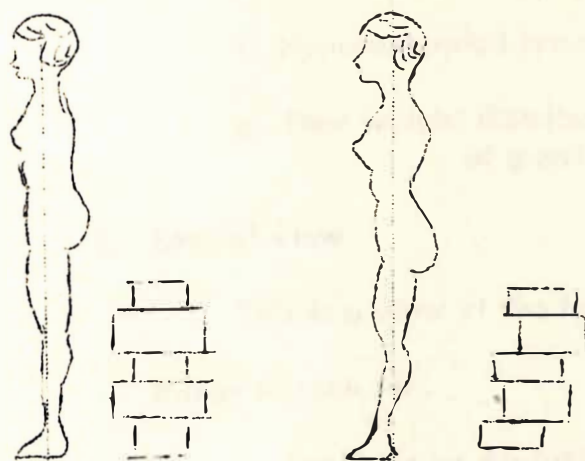
Good standing position implies that, according to an individual's structure, the body parts are properly lined up. Instead of the old concepts applied to certain areas, "shoulders back," "abdomen in," etc., which simply produce tensions and

Good
standing
position

artificiality when you attempt to follow them, let us consider some other suggestion possibilities. Try just standing "tall," reach up with the top of your head toward the ceiling. Or, perhaps, imagine that you are suspended from a string affixed to the top center of your head. This should help you to line up body parts naturally.

Center
and Line
of gravity

We know that the force of gravity is exerted on the human body as it is on all masses. A basic principle in body mechanics is that a body must have the center of gravity over the supporting base in order to maintain stability and balance. Whenever the line of gravity (an imaginary vertical line passing through the center of gravity) is not over the base, balance is lost. The body is composed of many parts each having its own center of gravity, and these must be in proper relation to one another to have efficient posture. "Gravity pulls through the common center of each combination of parts, and through the center of the entire structure."¹ The easiest way to illustrate this is to have the concept of blocks



stacked one upon another. If the blocks are properly stacked one over another, the stack will be well-balanced. If one block is misplaced, another or others must compensate to maintain the balance. Body structures will effect a similar compensation

with resultant tensions and faults in various parts of the body.

We can make three classifications of the most common faults.

I. Anterior-posterior view

This is actually a view of the body from the side such as you have in your picture which you will examine. The body so viewed will have

¹Eleanor Metheny, Body Dynamics (New York: McGraw-Hill Book Company, Inc., 1952), p. 108.

normal curves but when these are exaggerated, they constitute faults and call for correction. Exercises to stretch certain muscles and strengthen complimentary muscles are often recommended. Some deviations from the normal discernible from the side view are

- a. Forward head
- b. Kyphosis -- round upper back
- c. Lordosis -- exaggerated lower back curve often accompanied by abdominal sag
- d. Prominent abdomen
- e. Pelvic tilt
- f. Hyperextended knees
- g. Poor weight distribution -- shifting of weight away from the line of gravity

2. Lateral view

This is a view of the body from the back. These are some of the things to look for.

- a. Scoliosis -- deviation of spinal column right or left of center line
- b. Prominent hip
- c. High shoulder
- d. Knees -- either "knock kneed" or "bow legged"
- e. Weight distribution

3. Feet

- a. Pronation
- b. Low arches -- either anterior or longitudinal
- c. Toeing in or out

Dynamic
postures

The human body is seldom in a static position, at least during waking hours, but is usually in a state of motion. It is important to the individual to know how best to engage in normal everyday activities to get most efficient results with a minimum of fatigue. There are best ways to walk, to sit, to lift, and to do most of the usual body movements.

It must be remembered that this discussion has been a very general and cursory one. The purposes of this unit are to stimulate an awareness of the values of good body mechanics, to help the student establish better habits of using and developing the physical equipment which she has, and to encourage the student to have an intelligent approach to the modification of defects. It is strongly recommended that students who have a special interest in improvement or who find their own posture evaluation low elect further work in body mechanics.

The discussion of the evaluation of your own picture which follows should be of interest to you. General exercises for correction of some of the more common faults and some suggestions for efficient dynamic postures have also been included.

Obviously, only as an individual has a constant awareness of good postures will the deliberate exercising be of real value. It is important to develop a "feeling" for good body position and this will come only as a result of conscious neuromuscular re-education. Exercises for a limited time each day, even though faithfully done, will not be effective unless an effort is made to maintain good positions all the time. However, once you really consciously develop the "feeling" of good posture, it will become habitual, just as your present "good," "fair," or "poor" posture is habitual.

B. INTERPRETATION OF POSTURE PICTURES

In discussing standards of good posture, deviations, and possible corrections, it is most helpful to the instructor and to the student to have a picture showing the student's best standing posture. These pictures provide a valuable aid to the instructor in interpreting the student's posture to her and in pointing out where improvements can be made. This opportunity to see herself furnishes the student with an excellent Value of the posture picture guide for personal evaluation. The picture records permanently the student's standing posture. Instructors have an opportunity to study it and refer to it in helping the student at any future date. In the event that a student elects to improve the position and use of her body through work in posture and body mechanics, the picture is available to help the instructor in guiding the student, and to provide a means of comparison so that improvement can be noted. The picture is also good motivation for the student as she works on self improvement.

Posture pictures are taken of all freshmen at Woman's College. These are negative prints on photostat paper, where black shows up as white and white as black. These prints also reverse right and left, which is important to remember in looking at the back view. A true picture of the posture can only be obtained by removing any clothing which obstructs the view of the body position. Two small aluminum pointers are put on the back and one on the chest, and a small piece of tape is placed on the Taking the picture ankle. These landmarks help in the rating of the picture. As has been explained, postural deviations occur in two planes. To obtain a complete picture of the student's posture, a side view and a back view must be taken. Conditions of forward head, low chest, kyphosis, forward shoulders, prominent abdomen,

pelvic tilt, lordosis, hyperextended knees, poor anterior-posterior weight distribution can be noted from the side or anterior-posterior view. Similarly, conditions of uneven shoulders or scapulae, scoliosis, prominent hip, poor lateral weight distribution, knock knees, bow legs, and pronation can all be observed from the lateral or back view.

Evaluation of picture

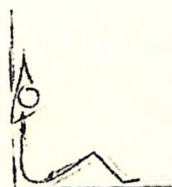
Using the landmarks placed on the subject, two lines are drawn on the side view picture. One line is drawn through the two points on the spine and the other line through a point marking the most prominent part of the abdomen and a point on the sternum. Ideally, these two lines should be vertical, parallel to each other, and equidistant from the landmark on the ankle. Many postural deviations prevent this. If, for example, the abdomen were prominent or the chest low or the subject's trunk were tilted forward or backward, the front line would deviate from the vertical. Likewise, if the trunk were tilted backward or the body weight were over the heels, the back line would be tilted backward. The back line also helps one to judge the amount of kyphosis or lordosis present. On the back view, the line drawn through the two pointers on the spine should bisect the body and fall between the heels. A deviation here could indicate that the subject stands with her weight more on one foot than the other.

Each picture is studied and classified as Good, Average, or Poor, on the basis of how the subject's posture compares with accepted standards of good posture. In studying the picture for grading, the above defects were kept in mind. The number of deviations and the degree (slight, moderate, or marked) of each deviation noted were guides in classifying the picture. Students whose pictures are classified as poor are strongly recommended to take body mechanics.

C. SUGGESTED CORRECTIVE EXERCISES FOR COMMON FAULTS

There is one general exercise which can, if properly done, improve general posture. Though it seems rather obvious, this exercise is simply to stand correctly. You must, of course, have an awareness of what good posture is. By standing before a mirror so that you can get a good view of your anterior-posterior position, you can make the proper adjustments for good body alignment. You can now "feel" the right position and with practice in recognizing this "feeling" will be able to assume it at will. Exercises are given for certain areas so that you can stretch, strengthen, and develop the musculature necessary for assuming and maintaining the correct position. You must remember that you are re-educating your neuromuscular system. You are attempting to acquire new habits of posture and so must not only discard the old familiar incorrect ones but develop the musculature necessary to the new habits.

1. Exercises for head and upper trunk



- a. Sit with hips, back, and head against wall; knees drawn up, feet flat on floor; raise arms straight over head, elbows and hands against wall.

Pull arms down slowly offering own resistance until hands reach shoulder level. Keep lower back in contact with wall.

Variation: This exercise may be done away from wall with towel or wand held over head, hands shoulder distance apart. Keep the head back.

- b. Lie in prone position; clasp hands in back of head.



Lift the trunk and extend the spine keeping the head in line with the trunk and the elbows back. Get the feeling of straightening the upper back and neck, not hollowing the lower back.

2. Exercises for pelvis region and lower trunk

- a. Lie on back, arms at sides



Raise one leg at a time to the vertical and slowly lower.
(Caution: Do not use double leg raising. It can be a dangerous exercise unless the individual has enough abdominal strength to keep the lower back from hollowing.)

- b. Stand with one hand on abdomen, other on buttock muscles.

Flatten the lower back by pulling up with the abdominal muscles and tucking the gluteals under.

Variation: This exercise may also be done in a back-lying position, one hand on abdomen, the other at side. Flatten lower back to floor. If this is too difficult, knees may be partially drawn up at first.

3. Exercises for feet

- a. Stand with feet parallel about six inches apart.

Keeping toes and outside border of foot in contact with floor, shorten distance between toe and heel. Alternate right and left.

- b. Stand in same position

Tighten gluteal muscles and attempt to turn backs of knees toward each other keeping feet straight ahead.

- c. Pick up socks, marbles, or other objects with feet.

- d. Place pencil under all five toes, point extending slightly past little toe. Write your name.



- e. Stand facing wall with hand support.

Rise on toes; slowly lower to heels, keeping weight on outer borders.

D. DYNAMIC POSTURES

We have discussed posture previously with emphasis on best standing position. We should regard this only as a basic point of reference as most of our activities are not performed in a standing position but in assumed positions related to the activity to be performed. Our concern here is, therefore, not with static postures but with the assumption of these various body positions in everyday activities -- these we have already defined as dynamic postures.

Basic principles

There are certain principles basic and common to these activities.

1. To maintain body balance, the center of gravity must be over the base of support.
2. The wider the base of support, up to a certain point, the greater the stability. (You know that you can maintain balance better with your legs apart.)
3. Since there is a transfer of weight in movement, the individual must have a base of support ready.
4. The base of support should be widened in the direction of force so that the body is ready to receive or impart force as in pushing or pulling.
5. Any object that you lift and/or carry should be considered as becoming part of you and should be as close to the body as possible.

Performance of Everyday Activities

1. Sitting

a. Taking a seat

The proper and graceful way is to place one foot under the chair and with the trunk inclined slightly forward lower yourself into the chair. To sit in upholstered furniture, turn sideways and with closer foot forward, lower yourself and then turn and ease yourself into the chair or couch.

Common faults: Leaning too far forward.
Losing balance and flopping.

b. Sitting

Sit with the hips well back so that thighs as well as the hips become the base of support. You should have the weight evenly distributed. When it is necessary to lean forward, the trunk should work as a unit.

Common faults: Crossing the legs or sitting on one leg in an unbalanced position.
Slouching and sitting on the end of the spine.

c. Rising

The same procedure should be followed as in taking a seat, only in reverse.

Common faults: Leaning too far forward.
Pushing yourself out of the chair with the arms.

2. Walking

Good standing position is basic. It is important that the transfer of weight be made efficiently from one foot to the other.

The foot should contact the ground in front: heel, outside border of foot, ball of foot, with a push off from the ball of the foot preparatory to the next step forward.

The feet should point straight ahead and should move parallel to each other with the inside borders falling on an imaginary line.

There should be a minimum of lateral motion in the hips and feet.

Common faults: Toeing in or out.
Leaning forward.
Bouncing up and down.
Flipping feet sideways.
Excessive hip and arm movements.

3. Stairs

a. Ascending

Place the whole foot on the stair; use thigh muscles rather than foot muscles to lift.

Incline the trunk slightly forward.

Common faults: Leaning too far forward.

Excessive push off: bouncing.

b. Descending

Feet should point straight ahead, body erect.

Head is tilted slightly forward so that you can see tips of toes.

Common faults: Toeing out.

Leaning too far forward.

4. Lifting

Stand as close to the object as possible.

A stride position gives a better base of support.

Stoop with back straight and whole trunk inclined slightly forward.

Regardless of the weight of the object, stoop to the level of the object to be lifted.

Lift either from the side or front.

Lift by straightening the legs, using heavy thigh muscles.

Use the same suggestions in reverse for lowering an object.

Common faults: Reaching out for the object rather than getting close to it.

Bending with the legs straight and using the back.

5. Reaching

Reach up with the feet in a forward stride position with the weight over the forward foot.

As you lift the object, transfer the weight to the back foot and lower the object to a carrying position keeping it close to the body.

Common faults: Standing with feet in side stride position or directly under the object to be lifted so that the weight of the object as it is lifted forces the arms back, causing the back to hollow in an effort to maintain balance. This may cause strain and back injury.

6. Carrying

Keep the object close to the body

Try to maintain a well balanced position. Compensations for additional weight should be made from the base of support up.

In carrying several objects, try to balance them on both sides of the body; In carrying one, shift occasionally. Books, boxes, and other objects may be carried on the forearms in front of the body for short periods of time. They may also be carried under the arm provided the load is not excessively heavy and the proper weight shift is made.

Trays should be carried on the hand at shoulder level with the free hand helping to balance.

Common faults: Carrying the object away from the body.

Compensating locally for additional weight.

Carrying books, suitcases, etc., incorrectly habitually can cause prominent hip and high shoulder and eventually may result in lateral curvature of the spine/

7. Pushing

To push something straight ahead, push opposite the center of gravity of the object being moved.

Stoop to lower oneself to this position by bending the legs and not the back; the feet should be in a forward stride position and the trunk inclined slightly forward. In this position, you are ready to apply force from the whole body initiating the drive from the legs.

Common faults: Using the back.

Pushing from improper level

Using just the arms.

Feet in side stride position.

Not inclining the trunk in the direction of force.

8. Pulling

Stand with the feet in a forward stride position.

Incline the trunk slightly backward as you exert force

If necessary, lower the body by bending the legs so that the pull is in line with the direction in which you want the object to move. Arms should be straight.

Common faults: Same as for pushing.

The above movements are used in various combinations in physical education activities. Proper balance, good body alignment, correct transfer of weight, and proper exertion of force are all important in best performance. Examples are balancing body weight as you take the address position in golf, getting proper alignment before drawing the bow in archery, transferring weight as you catch a basketball, and using the whole body to impart force is a fore-hand drive in tennis.

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UNIT IV

RELAXATION

Part I - Theory of Relaxation

A. Importance of Relaxation

1. Relaxation is important in our daily life activities for the conservation of human resources and is essential for endurance, efficiency, and health. A person desires to relax as a preparation for more dynamic output of effort.
2. It is believed that people who live dynamically without being too tense have four main attributes.
 - a. Rhythm in their activities with great swings in output and accomplishment.
 - b. A sense of values which makes it possible to minimize effort and strain.
 - c. Ability to reduce muscular tension consciously in parts of the body whenever desired.
 - d. A readiness to fall asleep at will.¹

B. Definition of Relaxation

There are two definitions of relaxation that we want to consider.

1. Relaxation means a diversion or recreation. This type of relaxation would serve to counteract "Boredom."

¹Morris Fishbein, "How To Relax," Hygeia, May, 1942. P.350.

2. Relaxation means the release of tension in voluntary muscles.

Relaxation is the absence of contraction and the direct opposite of hypertension.

- a. When a muscle is tense, it is contracting and its fibers are shortened. "Walking, talking, breathing, and all of our activities involve a series of complicated and finely shaded tensions of various muscles."² Actually, in relaxation, one is trying to make the muscles less tense.³ Due to a continuous slight contraction of a small degree of the component fibers producing what is known as muscle tone, the muscles will not become completely relaxed.⁴
- b. Relaxation is applied to nervous as well as muscular phenomena. It is difficult to separate or distinguish the manifestations and effects of the two. "Muscles compose about half of the weight of the entire body. Every muscle is supplied with a double set of nerves, one set bringing messages to the muscle, the other carrying messages from the muscle to the spinal cord and brain.

²Edmund Jacobson, You Must Relax (New York: McGraw-Hill Book Company, 1948), Pp. 63-64.

³Ibid.

⁴Laurence E. Morehouse and Augustus T. Miller, Jr., Physiology of Exercise (St. Louis: C. V. Mosby Company, 1948), p. 30.

Whenever the nerves coming to the muscle are active, the muscle which they supply is active."⁵ When muscles relax, the nerves to and from those muscles carry no messages; the nerves are inactive. "Neither muscles nor nerves function as units in themselves but only as elements in the nervous-muscular system. Therefore by relaxing muscles the whole nervous system ultimately is influenced."⁶ "It is physically impossible to be nervous in any part of your body, if in that part you are completely relaxed."⁷

- c. From experience in the clinical field as well as from laboratory tests, Jacobson says, "That it is indicated that if you relax your skeletal muscles sufficiently (those over which you have control), the internal muscles tend to relax likewise."⁸

C. Tension

1. "Scientists have discovered that tension is the underlying cause in many physical and mental diseases. Out of my own studies and experience has grown a conviction that tension, because of its

⁵Jacobson, op. cit., p. 31.

⁶Ibid., Preface, XIV, XV.

⁷Ibid., p. 50.

⁸Ibid., pp. 58-59.

effect on the organs of the body and general health, is the great killer after middle age; that it is at the root of much of our child delinquency, and the cause of many personality distortions, frustrations, and widespread unhappiness."⁹

"Tension is like a pebble thrown into a quiet pool, the ripples spread until they reach the farthest bank. They not only affect your health and your spirits, your energy and your capacity for joyous living, but they react upon your family and your friends, your co-workers and your community."¹⁰

2. Definition of Tension "When we say that a person is 'tense' we mean, in popular terms, that he is 'highstrung.' When we say that a muscle is 'tense' we mean that it is contracting; that is, its fibers are shortened."¹¹ Nerve discharge into muscle, then, produces muscular contractions, whereupon movements occur or else the muscle becomes more or less rigid. This gives us a convenient way to describe overactive nerves or high nerve tension. It is the failure of the individual to be relaxed when and where she should be normally."¹²

⁹Karin Roon, The New Way to Relax (New York: Greystone Press, 1949), p. 6.

¹⁰Ibid., p. 6.

¹¹Jacobson, op. cit., p. 63.

¹²Jacobson, You Must Relax, p. 33.

3. Three types of tension that we are concerned with:

a. Primary - tension necessary for the work being done.

(1) Activities necessary for an occupation:

movements of the hand to hold the book or pen, movements of the eyes to follow the words, contractions of those muscles needed for posture.

Primary activities may be unnecessarily intense for their purpose. (Person may sing too loud.)

- (2) Differential relaxation is the ability to use only primary tensions for the work being done. It means the least amount of tension in the muscles required for an act along with the relaxation of other muscles.¹³ "Many people waste more energy than they use when they work. They use muscles that are not needed for the job in hand, unaware that they are tense."¹⁴ Better effects will be produced by not trying so hard, however,

¹³ Ibid., pp. 117-119.

¹⁴ David Harold Fink, Release from Nervous Tension (New York: Simon and Schuster, 1943), p. 105.

this relaxation should not exceed the point where maximum efficiency is lost.¹⁵ Many instances of differential relaxation can be found in daily life activities:

- (a) The voice student is taught to sing with the throat and jaw muscles relaxed as much as possible.
- (b) The good golfer learns to have a certain relaxation in her strokes.
- (c) The dancer produces an impression of grace and ease by relaxing such muscles as she does not require.

(Refer to page 74 for examples of differential relaxation techniques as applied to activities in a sitting position.)

¹⁵Katherine F. Wells, "A Series of Twelve Short Lessons in Posture and Body Mechanics," (unpublished material, Wellesley College, Massachusetts.)

DIFFERENTIAL RELAXATION TECHNIQUES APPLIED TO

SITTING ACTIVITIES

The activity should be performed by using the principles of efficient movement. (Refer to Unit III, on Body Mechanics.)

1. Reading

"Relax the lower legs, relax the back in so far as sitting posture permits, relax the arms as far as possible - arms should rest on arms of chair - edge of book should rest on lap or table, fingers relaxed as much as possible while holding book. If chair has no arms book should be held resting on desk or be supported by book rest. The forehead and eyes should only be tense enough for the words to be read and the meaning clearly understood. The throat, tongue, lips and jaw should be relaxed."¹⁶

2. Writing

"Similar parts should be relaxed as in reading - with non-writing arm relaxed on desk. Hand holding pencil or pen should be relaxed as much as possible."¹⁷

3. Typing

"Similar parts should be relaxed as in reading or writing - do not hunch shoulders - relax fingers and arms as much as possible."¹⁸

¹⁶ibid.

¹⁷ibid.

¹⁸ibid.

DIFFERENTIAL RELAXATION TECHNIQUES CONTINUED

4. Driving

Adjust the seat so that you can reach the pedals with the knees slightly bent instead of stretched, or fit a pillow behind your back to bring you forward and relieve the tension.

Sit well back in the seat before touching the starter. Make sure that your back touches the back cushion. Put both feet flat on the floor. Let your legs relax. When you have done this there is no rush to get started.

When not shifting gears, keep your left foot on the floor, not on the clutch pedal. Let your left leg rest; hold the wheel lightly. Let your face and eyes relax as much as possible; try to look at the road instead of constantly staring. Use the red light as a time to relax the muscles.

5. Meal time

Similar parts should be relaxed as in reading. Start by putting both feet on the floor, and think how heavy your legs are.

6. Dentist Chair

Don't cross your legs, clench up your fists, and wait for certain torture. Let both feet rest easily on the platform, while your arms hang passively at your sides. Talk to your legs and arms, saying, "Let go, let go more."¹⁹

¹⁹Fink, Release from Nervous Tension, pp. 37-90.

- b. Secondary -- tension not necessary for the work being done but may accompany it.

Activities not needed for the task in hand:

looking up and turning the head to follow a distracting noise, or wrinkling the forehead, or frowning too often.

In practicing differential relaxation, these secondary activities should be relaxed to the extreme point since they are generally useless.

(See chart on page 77 .)

- c. Residual -- tension remaining when an individual is apparently resting. The inability to relax because of neuromuscular hypertension. (See chart on page 78 .)

4. Causes of Tension

If symptoms of residual tension are noticed, the causes of tension should be determined. Daily living habits are some of the most common causes for both mental and physical tension. The three sources of tension are mental, emotional and physical.

(See chart on page 79, and check any causes of tension that you may have.)

SECONDARY TENSIONS

Check below any secondary tensions that you may have:

Secondary Tensions	Occasionally	Frequently
1. <u>Gesticulate unnecessarily</u>		
2. <u>Speak rapidly</u>		
3. <u>Speak with a shrill pitch</u>		
4. <u>Make excessive facial movements</u>		
5. <u>Wrinkle your forehead</u>		
6. <u>Frown too often</u>		
7. <u>Move eyes unduly</u>		
8. <u>Wet your lips with the tip of your tongue</u>		
9. <u>Clamp your teeth hard together</u>		
10. <u>Finger objects such as hair, handkerchief, etc.</u>		
11. <u>Crack your knuckles</u>		
12. <u>Bite your nails</u>		
13. <u>Tap your pencil</u>		
14. <u>Tap your fingers</u>		
15. <u>Constantly glance at your wrist watch</u>		
16. <u>Chew excessively</u>		
17. <u>Shift or turn about excessively</u>		
18. <u>Cross and uncross legs</u>		
19. <u>Swing foot</u>		
20. <u>Take rigid postures</u>		
21. <u>Hunch shoulders</u>		
22. <u>Perform learned activities with poor coordination and extraneous movements</u>		

SYMPTOMS OF RESIDUAL TENSION

In making a self analysis we should see whether we have many of the symptoms of residual tension. These excess tensions help lead to fatigue.

Check below any symptoms of residual tensions that you may have:

<u>Residual Tension</u>	<u>Occasionally</u>	<u>Frequently</u>
1. <u>Restless behavior</u>		
2. <u>Rigid posture</u>		
3. <u>Inability to relax</u>		
4. <u>Insomnia</u>		
5. <u>Irritability</u>		
6. <u>Impatience</u>		
7. <u>Worry</u>		
8. <u>Jerky movements</u>		
9. <u>Spastic condition of smooth muscles</u>		
10. <u>Abnormal excitability of the heart</u>		
11. <u>Abnormal excitability of the respiratory apparatus</u>		
12. <u>Lack of calmness</u>		
13. <u>Nervous instability</u>		
14. <u>Accumulative fatigue</u>		
15. <u>Excessive mental activity when attempting to relax</u>		
16. <u>Nervous tics</u>		
17. <u>Others</u>		

CAUSES OF TENSION

Check below any causes of tension that you may have:

Causes	Check
Mental Causes	
1. Fear	
2. Worry	
3. Lack of spiritual security	
4. Lack of material security	
5. Anxiety	
6. Exams	
Emotional Causes	
1. Grief	
2. Disappointment	
3. Unhappiness	
4. Loneliness	
5. Frustrations	
Physiological Causes	
1. Handicap with which the individual was born	
2. Misuse of muscles	
3. Fatigue	
4. Disease	
5. Injuries	
6. Poor posture	
Environmental Causes	
1. Noise (loud alarm clock)	
2. Competition of the self with other people	
3. Pressure from home	
4. Modern industrial civilization	
5. Pressure of grades	
6. Impact of other people	
7. Effects of certain colors	
8. Effects of certain types of furniture	
9. Failure to balance the time budget	
10. Lack of organization	
11. The impact of confused impressions	
12. Bargain sales	
13. Jay walking	
14. Racing when driving	

D. Fatigue

1. "It is a striking principle of biology that activity of living cells tends to produce an inhibition of that activity."²⁰ Fatigue is the loss of power or capacity to respond to stimulation. "In normal activity, the excitations from the nervous system play upon muscle tissue at a rate so high that there is not time enough for a proper period of recovery between each two excitations. If an effort be made to continue the activity too long, the muscles will fail to respond, because they have not had sufficient time to recover."²¹

2. The three phases of fatigue are:

- a. Normal -- fatigue that is the result of hard work, which makes one tired and hungry. Rest, sleep, and food are used to relieve.
- b. Chronic -- accumulative kind of fatigue that is hard to overcome.

(I) Symptoms of chronic fatigue:

- (a) Weariness before starting the day's work
- (b) Restless behavior
- (c) Rigid postures, general or local
- (d) Insomnia

²⁰ Josephine L. Rathbone, Corrective Physical Education (fourth edition; Philadelphia: W. B. Saunders Company, 1949), p. 140.

²¹ Ibid.

(e) Crossness and impatience

(f) Inability to relax (The over-tired person is always active)

c. Exhaustion -- extreme fatigue or depletion of energy. This condition would necessitate medical attention.

E. Boredom

1. Definition -- "Boredom can be a serious illness... It is the mental counterpart of that physical state which we call fatigue."²² Lack of activity rather than too much exertion, is usually the cause of boredom, combined with the monotony and the lack of satisfyingness. Work which is drudgery, instead of enjoyable and creative, produces an attitude which influences the mental and the physical processes. Play which is not truly recreation, but is the expression of a restless urge to do something different regardless of the strength and endurance of the individual, is a waste of energy and often increases rather than eliminates fatigue.

2. Two Phases of Boredom:

a. Acute -- Temporary boredom which is not necessarily a sign of trouble.

b. Chronic -- This type of boredom is serious. "It is an

²²Arnold A. Hutschnecker, The Will To Live (New York: Thomas Y. Crowell Company, 1951), p. 237.

evidence that the creative instinct has surrendered and the will to live has handed in its resignation."²³

3. Some of the Causes of Boredom:

- a. Lack of activity rather than too much exertion.
- b. Discontent in a given situation: the company or the occupation may not suit.
- c. Monotony and the lack of satisfyingness.
- d. Routine occupations.

4. Action Against Boredom:

- a. A diversion or recreation: A change of surroundings, short trips, or a new activity.
- b. Sleep.
- c. Leisure time spent in ways which will give expression to those creative impulses which our work does not satisfy.
- d. Joyous emotions.

F. Life On a Stroke-Glide Basis

- 1. "Life is on a stroke-glide basis, muscles contract, then relax; you release power, then recover...In every glide there is recovery; wastes are eliminated...We must pay our debts after every muscle

²³Ibid.

stroke or we acquire a debt. To accumulate too great a debt means tiredness, followed by fatigue....

Muscle contraction, i.e.
stroke (many times each
second)

Delivers heat and energy,
Furnishes power to act,
Piles up wastes which
cannot be stored.

Muscle relaxation, i.e.
glide (many times each
second)

Eliminates waste, in the presence
of oxygen, clearing the way for
the next stroke. If wastes
accumulate, fatigue comes on
quickly."²⁴

2. Rhythmic living is paying your debts after each muscle stroke.

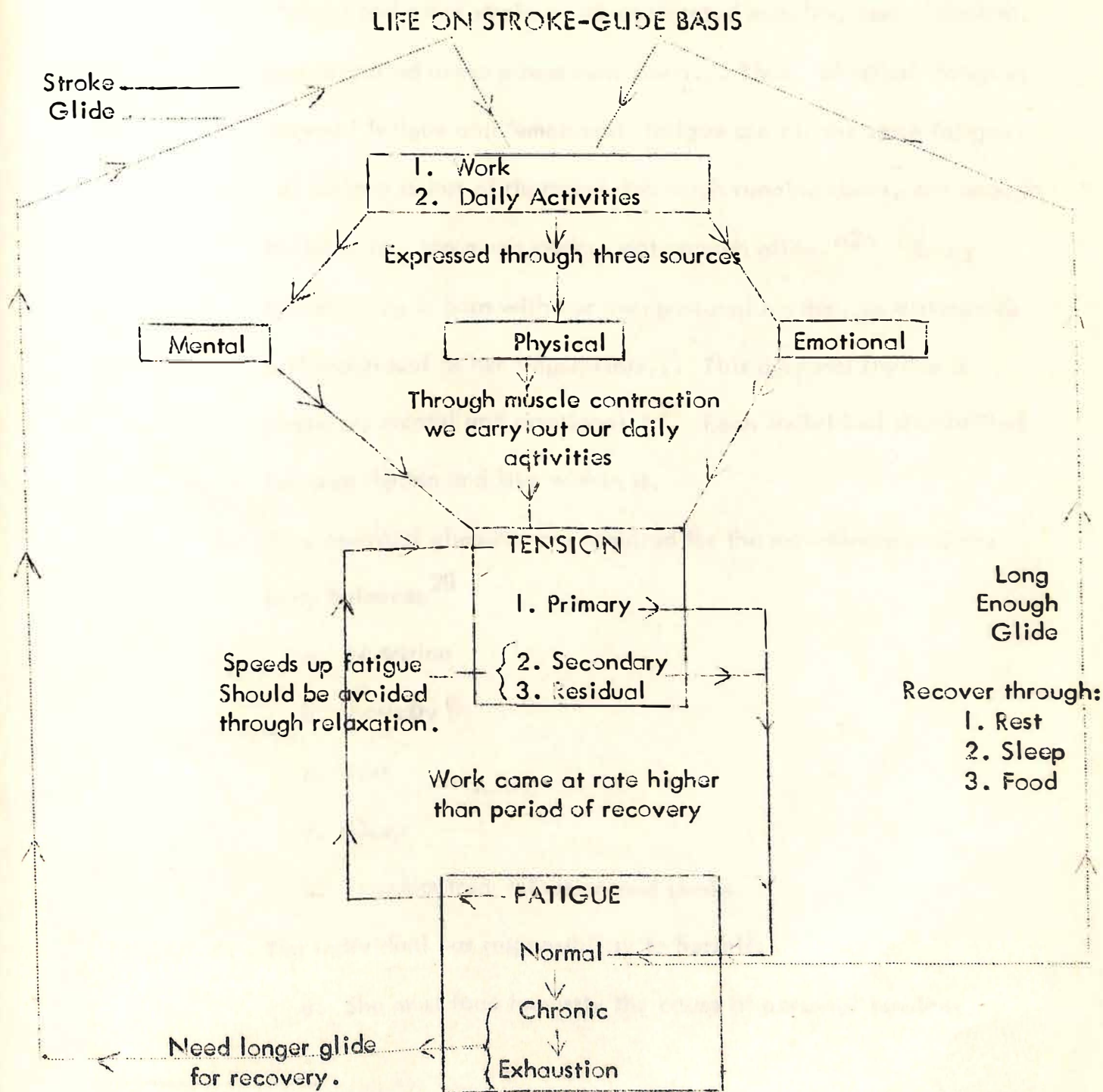
Exceed your rhythmic pace and fatigue comes on. Throughout the work of a day a person will eventually tire and feel normal fatigue. Through rest and sleep the body will pay its oxygen debts and repair its parts. Sleep is the principal time in which we pay our protein debts: Utilize the protein of our diet for the repair of parts.

3. There are two ways of pushing ourselves to the point of exhaustion through loss of rhythm:

- a. Through prolonged strenuous "physical" activity.
- b. Through "mental and emotional" activity as in worry, rage, fear, hate and even in periods of unnaturally high excitement, rush, haste and a lack of a joyous outlet in some activity in which the individual may put her whole self.²⁵

²⁴ Joy B. Nash, *Teachable Moments A New Approach To Health* (New York: A. S. Barnes and Company, 1938), pp. 131-133.

²⁵ Ibid., p. 133.



4. "Worry and other strain cause contracted muscles, loss of rhythm, and so-called nerve power runs down... Thus, 'physical' fatigue, 'nervous' fatigue and 'emotional' fatigue are all the same fatigue... All fatigue is loss of rhythm---too much running down, not enough building up; too much stroke, not enough glide."²⁶ "Every human being is born with her own personal rhythm, as distinctive and individual as her fingerprints... This personal rhythm is physical, mental and emotional."²⁷ Each individual should find her own rhythm and live within it.
5. Five essential elements are required for the maintenance of the body balance:²⁸
 - a. Nutrition
 - b. Activity
 - c. Rest
 - d. Sleep
 - e. Freedom from infection and strain
6. The individual has responsibility to herself:
 - a. She must face honestly the cause of personal tensions.

²⁶Ibid., pp. 135-136.

²⁷Roon, op. cit., p. 62.

²⁸Nash, op. cit., pp. 32-34.

- b. It is necessary for each individual to discover what factors should be modified in her own psychophysical health picture.
- c. She must appraise her own store of energy and her own body type. She must live within her reserve of energy.
- d. She must learn to relax on the job by releasing those muscles not needed for immediate tasks.
- e. She must practice the law of alternation, between work and rest.

G. Sleep

1. Relaxing during sleep utilizes your sleeping hours to their greatest advantage. Your mental attitude while falling asleep will help decide the quality of sleep you enjoy. "You can lose your habitual muscle tensions while you sleep."²⁹
2. Findings suggest that the deepest sleep (the most relaxed sleep) is free or relatively free from day dreaming and excessive movement. According to Dr. H. M. Johnson, healthy sleepers shift normally from one gross bodily position to another between twenty and forty-five times in the course of a typical night of eight hours. Excessive movement would be interpreted to mean that beyond what Dr. Johnson indicates is normal. "Restless sleep is generally considered to be not so refreshing as sleep free from frequent movements."³⁰

²⁹Fink, Release From Nervous Tension, p. 78.

³⁰Jacobson, You Must Relax, p. 198.

3. Causes of Insomnia

- a. Illness.
- b. Habits of waking up at certain times.
- c. Night thinking.
- d. Excessive fatigue.
- e. Insecurity-fear of not passing exams, financial fears.
- f. Worry.
- g. Hunger pains.
- h. Coffee and tea affects some people.
- i. Tense muscles.
- j. Excessive movements.
- k. Over tense living.

4. Program for Sleep

- a. This is a problem that requires both physical and mental relaxation.
- b. Face your problems and come to a decision about them.
(Worry is a sign you haven't made up your mind.)
- c. "Cultivate habits of relaxation at night and during daily activities...
- d. Remember that a tense day is likely to be followed by a tense night.
- e. Practice lying down for an hour near noon and near sundown...

- f. Assume a fairly comfortable position, and if discomfort sets in do not shift repeatedly but relax in spite of discomfort.
- g. Remember to keep up your daily drill, or you may lose what gains you have made...
- h. Above all, try to develop a complete let go of the muscles of your eyes and speech.
- i. Learn to relax to some extent even in the presence of noises or other disturbances...³¹

³¹Ibid., p. 208.

PART II RELAXATION TECHNIQUES

Teaching Suggestions for the Instructor on Relaxation Techniques

1. Introduction to each exercise is in parentheses;
instructions to the students are underlined.
2. Devote the first portion of the period to learning to recognize tenseness in muscles. The remaining time should be given over exclusively to complete relaxation. The testing and the observation of the student could be made at this time.

(These directions should be given before the rest period at the end of each class.)

"Do not tense any part of the body. Try not to move at all during this period of relaxation. At least reduce the number of movements to a minimum. Do not hold any part quiet for this is being rigid, not relaxed."¹
3. Students should be brought out of their relaxed state in the same slow manner in which they were put in. They should have general stretching of their muscles; sit up slowly with continued stretching and then slowly come to a standing position.
4. A suggested time is given by each technique. The technique should be given slowly enough so that the student may acquire a relaxed feeling. If some of the students are not relaxed, they may repeat the bending and extending a few more times at their own rate of speed.

¹Jean Jackson, "A Series of Twelve Short Lessons in Relaxation Techniques," (Unpublished material, Wellesley College, Massachusetts.)

5. Teach the individual to recognize signs of tension.
 6. A tension record should be kept for each student and students who show definite signs of tension may be given additional help and encouragement.
 7. Students may be arranged alphabetically on the floor in such a way that they will be able to hear the instructor and be tested easily.
 8. Students should be far enough apart so that the hands do not touch.
 9. The directions of the instructor must be clear and concise, given in a pleasing voice, given slowly, quietly. (Be sure all the students can hear.)
 10. Mats or blankets should be used for the student to rest on, if possible.
 11. After the students learn to relax in a lying position these techniques should be practiced in a sitting position.
 12. Instructor should practice the technique of relaxation, therefore giving the mental picture of one who is able to relax.
- "Just as a relaxed person has the ability to relax those about him, so the tense person can generate tension."²

²Roan, The New Way To Relax, p. 21.

TESTING FOR TENSION

(Based on Rathbone, J.L.: Corrective Physical Education, 4th ed. pp. 175-177)

Taken from some Wellesley College Material.

Code: Relaxed ___, Slight S, Medium M, Marked Mk.

"The subject lies on her back on a firm, level surface. The eyes may be either open or closed. The instructor explains that she will lift an arm or a leg and perhaps move it back and forth, but that the subject is neither to help nor to resist. She should lie in as relaxed a state as possible and let the part hang inactive in the examiner's hand. The instructor then goes quietly from one girl to another and tests each one in any or all of the following ways:

1. Grasp one wrist and lift the forearm a few inches from the floor, then drop it. (Avoid forearm wearing wrist watch)
2. Grasp one wrist and lift entire arm off floor, then gently swing the arm back and forth from the shoulder. Replace arm on floor.
3. Grasp under one knee, lift a few inches and then drop it.
4. Push one foot from side to side, causing the entire leg to rotate at the hip joint."
5. Notice the following through observation:
 - a. Excessive movement (Shifting of the body in trying to find a comfortable position)
 - b. Facial expression (Strained)
6. The general comment should include a recommendation for the student if additional work is needed in relaxation.

RECORD CHART

Code:

Relaxed _____
Slight S _____
Medium M _____
Marked Mk _____

Name _____ Date _____ Class _____

Arms R L

Legs R L

Excessive movement _____

Facial expression (Strained) _____

General comment: _____

PART II RELAXATION TECHNIQUES

A. Introduction

There are many ways to approach the problem of relaxation: Mental hygiene, Posture work, Rhythmic activities, many kinds of recreational activities, conscious training in muscular relaxation. We will approach the problem with some exercises that will help in the conscious training in muscular relaxation. "Re-education of the muscle sense, learning to recognize and evaluate your muscle tensions, is one of the most important results of learning how to relax."¹ However, when muscles relax, the nerves to and from those muscles relax also, and the same doubtless happens in those parts of the spinal cord and brain to and from which the nerves run. Neither muscles nor nerves function as units in themselves but only as elements in the nervous-muscular system. Therefore by relaxing muscles the whole nervous system ultimately is influenced."²

In order to reduce excessive tension in muscles because of stress and strain we need to learn the art of relaxing these muscles at will. Jacobson has devised a technique--the training of the muscles to do more of nothing. "It is unique in that it is concerned with basic residual tension and how it can be lessened. The technique is based on the principle that one can consciously feel and learn to differentiate between tension and relaxation in muscles. The individual is told to contract certain isolated muscles and

¹Fink, *Release From Nervous Tension*, p. 77.

²Jacobson, op. cit., Preface XIV, XV.

muscle groups until she feels and recognizes tension, she is then told to go in a negative direction of doing more and more of nothing."³

Relaxation must be learned as any sport with which we come in contact. With a minimum of attention the disturbance is located and then relaxed. "Moments of attention to muscles become increasingly unnecessary in the course of months as relaxation becomes habitual. This is like any other learning process, requiring less attention as time proceeds. After relaxation has been cultivated, it proceeds. at its best, automatically with little or no clearly conscious attention."⁴

"Some of you automatically relax when you feel you are becoming tense. Some of you are quite tense but do not know that you are. Some of you know that you are tense but do not know how to release this tension."⁵ If an individual is greatly fatigued, sleepless or excited but has been that way only a few days or weeks, she may be able to relax with a minimum of practice. If an individual has been building up tense habits over a period of years it will take much longer to learn to relax. In some cases it may even take months. The speed at which one learns to relax depends entirely

³Alice P. McCabe, "Relaxation Refresher," (Unpublished material, Wellesley College, Massachusetts.)

⁴Jacobson, You Must Relax, p. 64.

⁵Jean Jackson, "A Series of Twelve Short Lessons in Relaxation Techniques," (unpublished material, Wellesley College, Massachusetts.)

upon the individual. If a person is tense, it is hoped that she will be able to eliminate many of her tensions by recognizing them and through further relaxation practice.

1. Responsibility of the individual in participating in relaxation techniques:

- a. Concentrate on what she is doing until she becomes trained in relaxation and it is automatic with her. She should find out where she is tense.
- b. Face honestly the cause of personal tensions and try to eliminate the habits that cause the tension.
- c. Learn the techniques here and practice them daily, until she is able to relax her muscles voluntarily when they become tense.
- d. Relax the muscle groups previously learned, simultaneously with each new muscle group learned, until she is able to relax the entire body.⁶
- e. Plan her daily living so she can eliminate tension in the future.

2. Setting the Stage

All feeling of rush must be eliminated --the mind and body must relax together. The environment must be conducive to relaxation.

⁶Jacobson, op. cit., p. 62.

- a. Quiet
- b. Lights out
- c. Soft music if desired
- d. Plenty of room
- e. Harmonious color
- f. Clean and attractive room
- g. Good ventilation

2. Position

Learn to relax lying down first and then apply to sitting and standing positions.

- a. Lie down on your back, arms away from the body and legs apart. Close the eyes and lie as still as you can. If the lower back feels tense, place a cushion under the knees or bend the legs until the feet are on the floor. A firm roll may be placed under the neck, the lower back, or the knees, if those parts of the body feel strained.
- b. Cover the body for warmth if necessary.
- c. Persons who are learning to relax while lying on the back need not hesitate to go to sleep in any other position to which they are accustomed.
- d. The student should be given three or four minutes to get herself as well relaxed as she knows how.

B. Exercises for Muscular Relaxation

1. Snow Man (Suggested time -- 4 minutes)

(The influence of the ideas upon which you dwell while in the rest position cannot be over-emphasized. Trying to stop thinking or to make your mind a blank will tend to tense you. "It has long been known that thinking and emotions influence muscle actions. This is the key to constructive rest. If one watches attentively certain specific movement in the body 'as if' it were taking place, motor impulses will be sent to the muscles, causing them to become less strained by changing their action."⁷

Visualize yourself as a snow man. It is the spring of the year and a warm sun is shining down on you. Remember you are the snow man. The warm rays of the sun are gradually melting your body away. Feel your head get smaller and smaller as it melts. Your shoulders, your arms are now melting. They are gradually disappearing. The sun reaches your chest, waist, and hips, and they gradually melt away. Feel your legs and your feet getting smaller, and smaller. You are now only melted snow.

2. Forearm (Suggested time -- 8 minutes)

Keep the eyes closed and lie as still as you can. "Raise right forearm to vertical and clench the fist. Note the feeling of activity

⁷Lulu E. Sweigard, "Posture and Body Mechanics," (Reprinted by permission of the Publishers, Julian Messner, Inc., from The Attractive Child -- The Care and Development of Your Child's Beauty by Constance J. Foster.)

throughout the entire arm. Hold it for a moment. Now let the arm fall limply, while fingers partly uncurl. Do not shift the arm after it falls, however slightly, nor hold it stiff. Now try it again - raise - clench - hold it - let it fall. Repeat but raise both forearms to the vertical."⁸ (Lowering the hand instead of letting it fall limply is a mistake made by many. "The fingers should not become straight. Watch for jerky motions - watch for extra motions.")⁹

3. Arm (Suggested time -- 6 minutes)

"Without moving left arm from your side gradually stiffen it like a rod and clench your fist. Hold it. Now let it relax a very little - a little more - more - more - very gradually."¹⁰ Repeat action, but stiffen both arms.

4. Legs (Suggested time -- 8 minutes)

("We frequently use the muscles of the legs unnecessarily, therefore, we need to learn to reduce the tension built up in them. Check yourself during the day to see whether or not you are tensing unnecessarily the muscles of the legs when the only muscles needed are those actually in use . . .)

"Extend both feet downward including toes - hold - let go slowly - more - more - more. Relax the arms also. Continue to relax more and more."¹¹ Repeat but bend both feet upward instead of extending them. Let the feet and toes go limp suddenly.

⁸Jackson, "A Series of Twelve Short Lessons in Relaxation Techniques," p. 1.

⁹Ibid.

¹⁰Ibid., p. 2.

¹¹Ibid.

5. Breathing Apparatus (Suggested time -- 6 minutes)

("Under physical or emotional strain you know that the breathing becomes more rapid and often uneven. This is caused by the contraction of the diaphragm and the associated muscle. Often these muscles remain in a state of hypertension. The breathing apparatus may be relaxed while standing, sitting or lying down.)

Take a slightly deeper breath than normal, exhale slowly until the chest sinks as far as it will go without effort. Do not force air out. Take another deeper breath, exhale slowly again inhale and exhale. When you have become relaxed, breathing motions of the chest and abdomen will be slow and slight.¹²

6. Speech Mechanism (Suggested time -- 8 minutes)

("The muscles of the speech mechanism develop more residual tension when you are thinking with words or while you are reading than when you are actually speaking. Speech, when it is rhythmic and free flowing, serves as a release device for thoughts. When speech is inhibited, the muscles associated with the formation of words become tense.)

"...Say "ouch" two or three times. Do you feel contraction in the upper abdomen, in your throat, in your tongue, in the muscles of the lower jaw and your lips? Whisper the words. Do you feel the tensions come back again though in a lesser degree? Just think the word. The

¹²Ibid., p. 3.

tensions are still perceived in the tongue and lips. Stop forming words or even thinking words. Let the lower jaw drop slightly. Keep the tongue quiet. Let the lips become soft. Relax the throat. Breathe rhythmically. Continue relaxing."¹³

7. Forehead (Suggested time -- 5 minutes)

("Some of us do a great deal of unnecessary frowning and because the muscles of the forehead and brow are held in hypertension so much of the time, we not only disfigure our faces but develop wrinkles long before it is time for them. These excess muscular tensions can be checked and removed during the day if we but watch for them.")

"...Wrinkle the forehead raising the eyebrows - hold it. Now let go slowly without frowning - more and more."

Repeat

"Frown, but do not wrinkle the forehead - frown harder. Now let go slowly - more - more. Let the rest of the body go at the same time."¹⁴

(Repeat)

8. Face and Mouth (Suggested time -- 5 minutes)

("Some of the signs of tension are very evident in mannerisms seen in the face and mouth. Again you should check yourself - do you hold your lips tight together, do you clench your teeth, or do you make other unnecessary motions with the muscles of the face? Each time you find yourself displaying any of these facial mannerisms, practice relaxing the muscles involved immediately.)

¹³Ibid. p. 4

¹⁴Ibid. p. 3

"...Press the lips together hard - hold them - now let them go slowly - more slowly - more - more - continue letting them go."

"...Clench the teeth - slowly let the jaw relax and drop. Let it go more."¹⁵ Repeat

9. Eyes (Suggested time -- 6 minutes)

("Generally speaking, the muscles of the eyes are used more than any of the other muscles and it is often difficult to relax them when we go to bed.)

"...Open the eyes - look to the right - hold it, feel the tension? Let the eyes slowly return to their normal position. Look to the left - hold - now let them return slowly. Repeat moving the eyes up, then down.

"Continue to look nowhere. Just let them go - do not hold them. Relax forehead and brow also."¹⁶

10. Back (Suggested time -- 8 minutes)

("Many of us complain of a tired back. This may be caused by poor seating, poor illumination, improper posture in sitting, etc. Any or all of these causes will increase the tension along the spine.)

"...Let the body go - arch the back so that the weight is on the head and the buttocks. Notice the feeling of tension along the spine. Hold it - now let it go slowly - half way. You can still feel some tension. Now let it go more - more - more. Make the trunk heavy.

After a few seconds repeat the technique."¹⁷

¹⁵Ibid., p. 4.

¹⁶Ibid., p. 3.

¹⁷Ibid., p. 4.

11. Shoulders (Suggested time -- 8 minutes)

("Usually the first place we feel pain when working at a desk or at a typewriter is at the back of the neck and across the shoulders. This comes from holding the head in one position, usually against gravity, for an indefinite period of time, and from holding the shoulders tense or in a hunched position. The technique we will practice may be done either sitting up or lying down.)

"Hunch the shoulders - hold them - now slowly let the muscles relax - more - more - more. Repeat twice. Continue to relax the neck and shoulders. Remember the keynote of relaxation is doing more of nothing.
Repeat, but sitting up, feet on the floor."¹⁸

12. Rapid Relaxation (Suggested time -- 8 minutes)

("Rapid Relaxation" by Mabel L. Fitzhugh. This technique may be helpful to you in relaxing at night.)

This method is suitable only on a soft mattress or bed. Lie on the back with a pillow under the head. Bend the feet up at the ankles: raise the head, keeping the chin drawn in: reach forward with both arms, stretching the fingers toward the toes: breathe in deeply through the nose: and then breathe out through the mouth as though heaving a deep sigh and, at the same time, let go all over. It is important to release all of the tension simultaneously."¹⁹

¹⁸Ibid., p. 5.

¹⁹Mabel L. Fitzhugh, "Rapid Relaxation," The Physical Therapy Review, Vol. 30, April 1950.

13. After learning to relax in a lying position these techniques should be practiced in a sitting position.

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- * Good references for the instructor.